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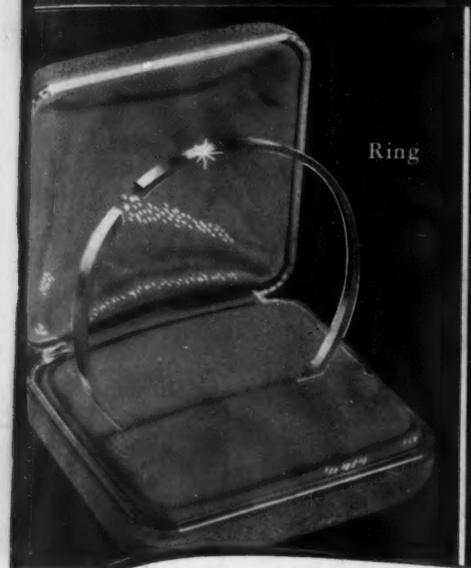
RAILWAY AGE

SER
DEC 19

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

DECEMBER 17, 1951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Piston

If they came in ~~SENIOR SPECIALISTS~~ a Jewel Box — they couldn't be Finer!

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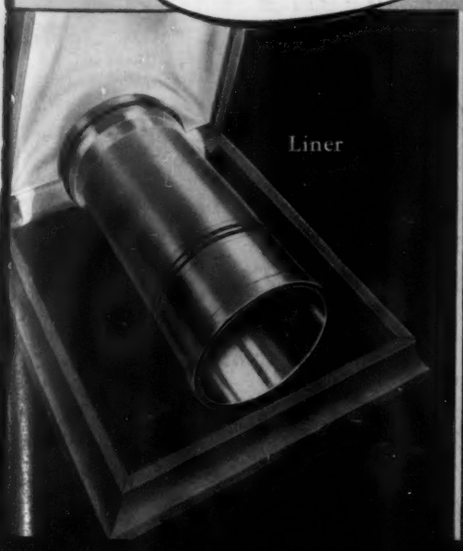
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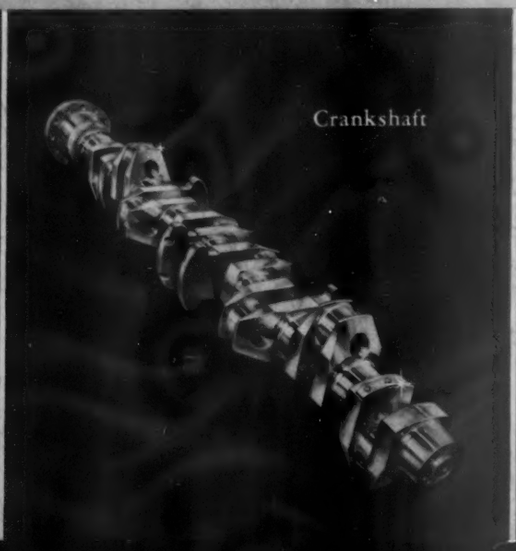
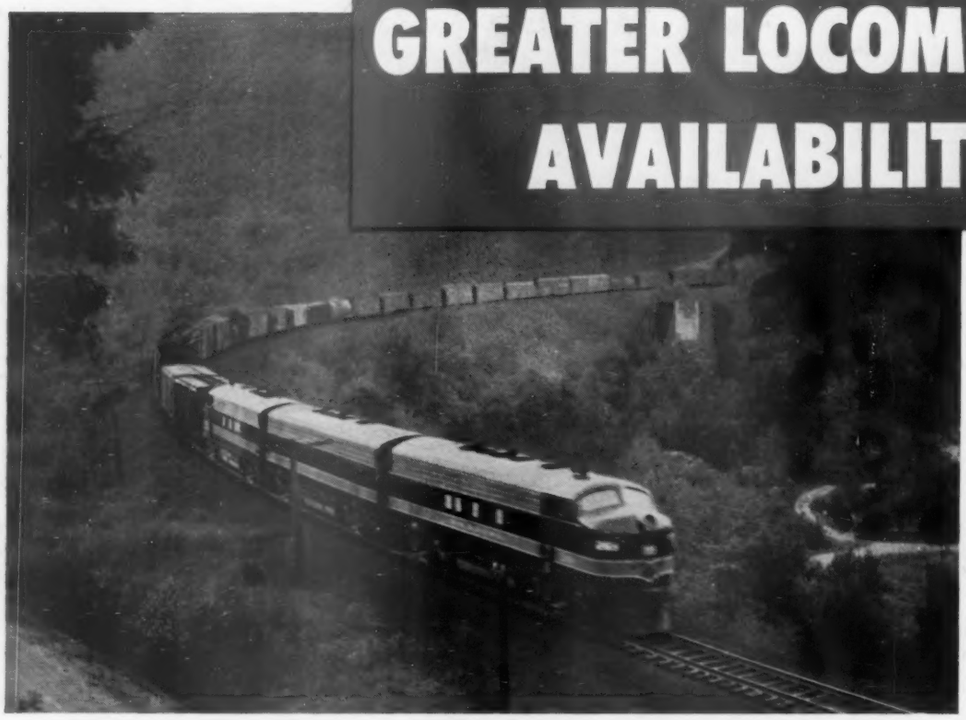
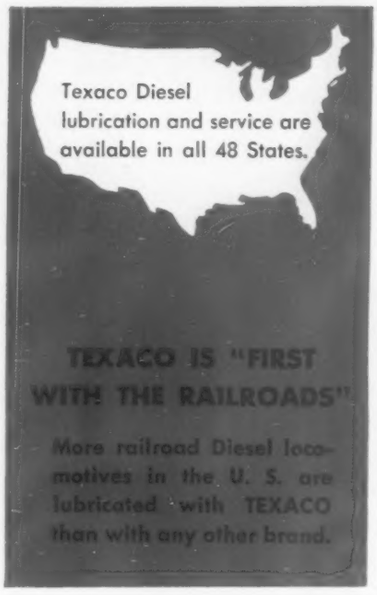

Crankshaft

Connecting Rods

GREATER LOCOMOTIVE AVAILABILITY



97-CAR READING FREIGHT coming up Broad Mountains, near Mainville, Pa. Curve 6° 50′; grade .67%; tonnage 7,000. Train is hauled by three 1,500 h.p. EMD F-7 units lubricated with *Texaco Dieseltex HD* —the ideal lubricant for severe service.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TEXACO IS "FIRST WITH THE RAILROADS"
More railroad Diesel locomotives in the U. S. are lubricated with TEXACO than with any other brand.

NEW YORK ★ CHICAGO
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... when Diesels are lubricated with TEXACO DIESELTEX HD

It's a fact—proved by years of experience on leading roads—that Diesel locomotives lubricated with *Texaco Dieseltex HD* spend less overhaul time in the shop. Reason is: *Texaco Dieseltex HD keeps engines clean!* It prevents harmful sludge, carbon and varnish . . . keeps rings free . . . reduces wear.

All this adds up to greater locomotive availability, less fuel consumption, lower maintenance costs—benefits that accrue even in the severest service.

Texaco Dieseltex HD assures these benefits because it is heavy duty—fully detergent and dispersive . . . and also has a special additive that notably increases resistance to oxidation. *Texaco Dieseltex HD* meets the stringent requirements of leading Diesel engine builders.

Other Texaco Economies

Texaco Texayce Oil assures year-'round protection . . . exceeds the A.A.R. all-year car oil specification . . . has proved its effectiveness by nearly a quarter-century of service on leading railroads.

Texaco Crater assures longer life and lower maintenance costs for traction motor gears . . . meets standards established by leading Diesel locomotive builders.

There is a complete line of Texaco Railroad Lubricants. Use them in conjunction with the unique Texaco Systematic Engineering Service and count on greater efficiency and economy. Get full details from a Texaco representative. Just call the nearest Railway Sales office listed, or write The Texas Company, *Railway Sales Division*, 135 East 42nd Street, New York 17, N. Y.

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FOR ALL RAILROAD DIESELS

TUNE IN . . . TEXACO STAR THEATER starring MILTON BERLE on television every Tuesday night. METROPOLITAN OPERA broadcasts every Saturday afternoon.

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Here are four types of bolts used in the construction of railway bridges and trestles. Each type is manufactured at Bethlehem's fastener plant at Lebanon, Pa. The bolts are made of new-billet steel in a wide variety of carbon or alloy grades, and come with cut or rolled threads, plain or hot-dip galvanized. Furnished with square or hexagon nuts.

In addition to these four types, Lebanon Plant also manufactures a full line of drift bolts and machine, carriage and lag bolts, as well as rivets, track bolts and spikes.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by Bethlehem Pacific Coast Steel Corporation. *Export Distributor:* Bethlehem Steel Export Corporation

BETHLEHEM STEEL

BRIDGE BOLT

Wrench head. Saves installation time because the integral-forged washer under head eliminates the need for combining a standard machine bolt and washer.

TIMBER BOLT

Head fits close to work, for minimum obstruction. Four diamond-shaped lugs on underside of head dig in, prevent bolt from turning. No washer required.

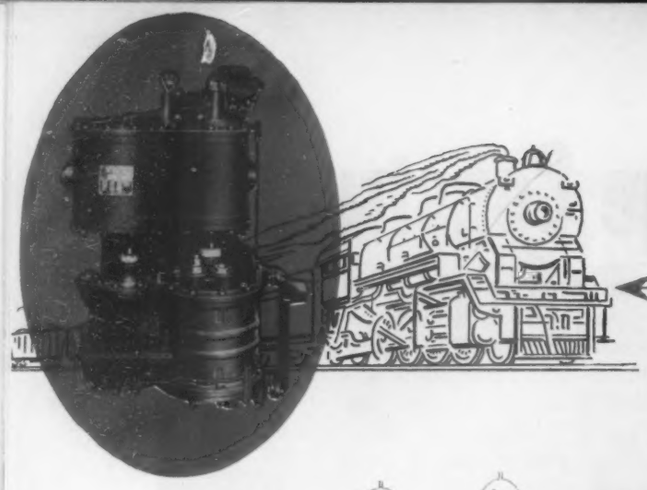
TIMBER GUARD RAIL BOLT

Designed to hold timber guard rail securely on trestles and elevated structures. Replaces machine bolt and washer. Fins dig into wood. Head is easy to grip.

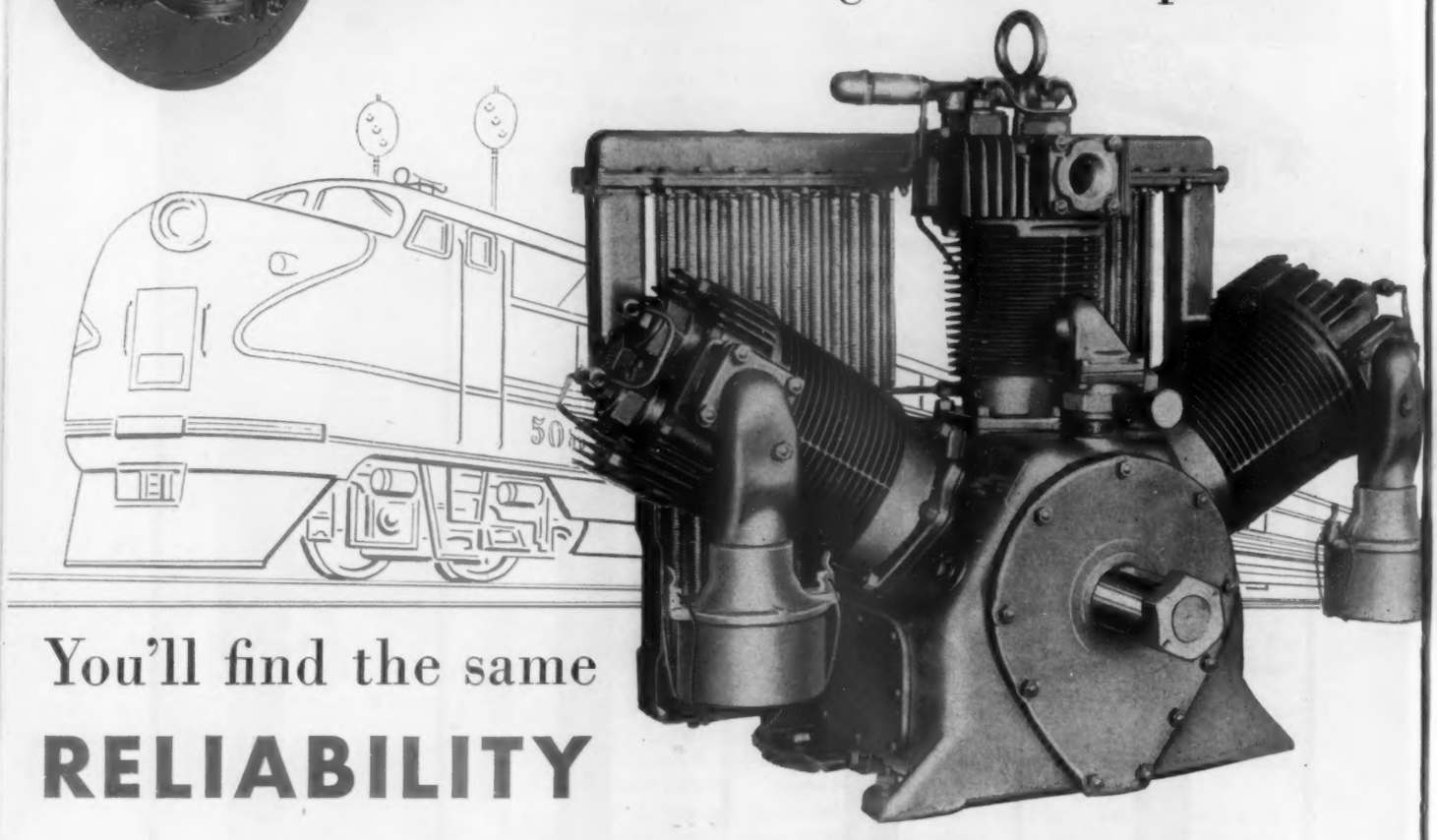
TIE BOLT

Used in inverted position to anchor wood ties. Large hook head grasps flange of structural steel securely. Bolt is run through the tie. Nut is applied from top.

Bethlehem supplies every type of Railroad Fastener



You know the DEPENDABILITY OF THIS Westinghouse Compressor



You'll find the same RELIABILITY in the Westinghouse CD Compressor

When it comes to a reputation for dependability—it's hard to beat the one established by Westinghouse steam-driven air compressors. Tens of thousands are still chugging away on the sides of steam locomotives—and each is a guarantee of a positive, dependable air supply.

The same fine engineering that made this compressor such a completely reliable performer is behind the Westinghouse CD Compressor for Diesel service. Every feature that will contribute to dependability, efficiency, and trouble-free service has been included. These include:

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2) Full pressure type lubrication system. A constant flow of filtered oil is maintained to connecting rod crankshaft bearings and wrist-pin bearings.

3) Cylinder wall and main crankshaft ball bearings are positively lubricated by a throw-off of oil from connecting rod bearings. Oil pressure relief valve "meters" the oil in accordance with compressor speed.

To give your new Diesel units a completely reliable air supply . . . use Westinghouse CD Compressors.

Westinghouse Air Brake Co.

AIR BRAKE DIVISION

WILMERDING, PA.

Brakes are Basic to Railroad Progress

Vol. 131, No. 25 December 17, 1951

RAILWAY AGE

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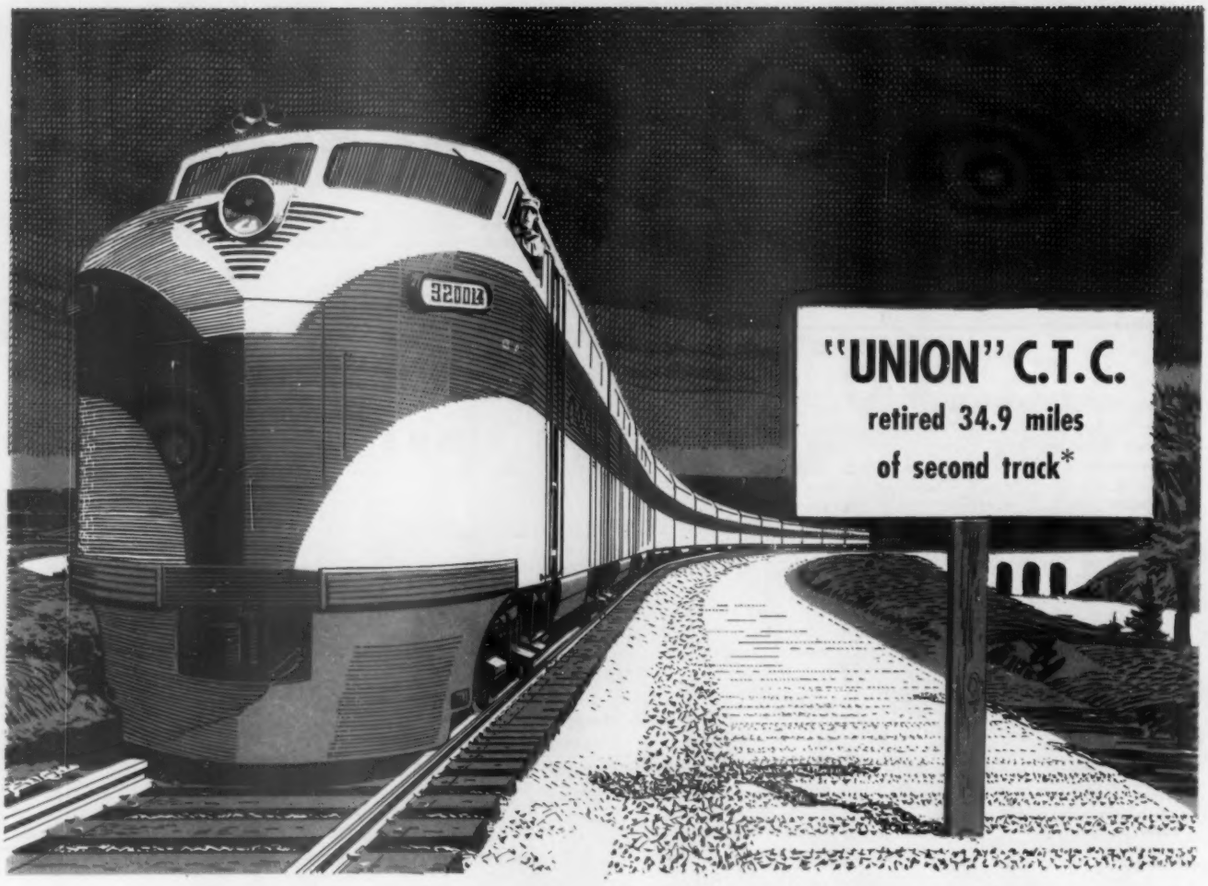
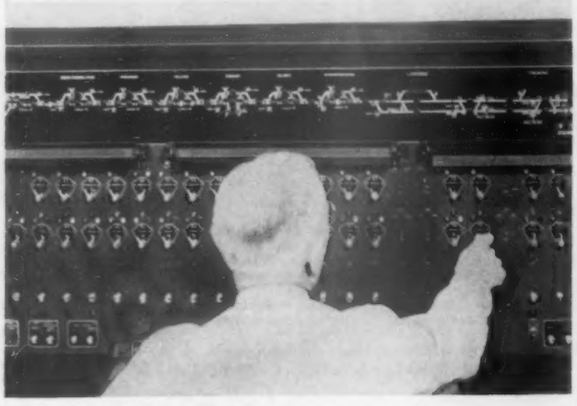


Here's a way to build profits ... by using *LESS* track!

This is the record

1. Centralized traffic control was installed on 137 road miles.

2. 27.81 miles of second main track were retired and 7.13 miles were converted to sidings.



3. Retired a substantial investment in grading for additional second main track where track had never been laid.

4. Retirements consisting principally of 28 miles of track and grading amounted to a gross credit to capital account of $1,085,389.00 or a net credit of $464,886.00 for the entire project.

**Factual data will be supplied on request.*

"Union" centralized traffic control can reduce terminal-to-terminal time with safety and pay its way through reductions in operating expenses. We'd like to help you use C.T.C. to reduce your operating costs.

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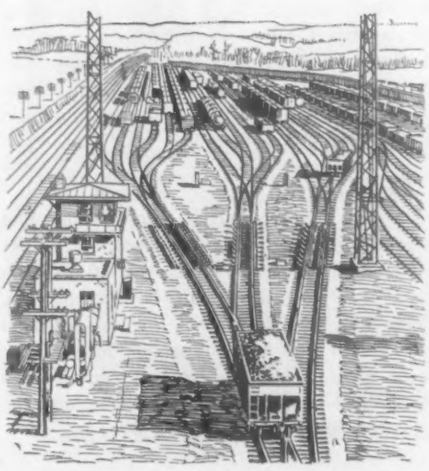
DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY
SWISSVALE PENNSYLVANIA
New York • Chicago • St. Louis • San Francisco

WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, ten months	
1951	$ 8,534,113,380
1950	7,683,079,585
Operating expenses, ten months	
1951	$ 6,719,696,853
1950	5,795,212,937
Taxes, ten months	
1951	982,295,028
1950	922,105,384
Net railway operating income, ten months	
1951	712,734,472
1950	815,072,304
Net income, estimated, ten months	
1951	476,000,000
1950	577,000,000
Average price railroad stocks	
December 11, 1951	54.84
December 12, 1950	52.12
Car loadings, revenue freight	
48 weeks, 1951	37,797,094
48 weeks, 1950	36,013,094
Average daily freight car surplus	
Week ended December 8, 1951	7,775
Week ended December 9, 1950	7,611
Average daily freight car shortage	
Week ended December 8, 1951	4,316
Week ended December 9, 1950	12,123
Freight cars delivered	
November, 1951	9,824
November 1950	5,791
Freight cars on order	
December 1, 1951	129,158
December 1, 1950	126,870
Freight cars held for repairs	
November 1, 1951	91,726
November 1, 1950	102,899
Net ton-miles per serviceable car per day	
September 1951	1,074
September 1950	1,084
Average number railroad employees	
Mid-October 1951	1,271,809
Mid-October 1950	1,291,549



In This Issue . . .

COMMON CARRIERS must be ready, willing and able to handle all kinds of freight that comes along. The railroads meet that test. Other so-called common carriers actually are "pick and choose" carriers. True common carriers thus labor under a competitive handicap, since they have peculiar performance obligations escaped by the less versatile types of transportation. If nothing is done to correct this discriminatory situation, eventual financial ruin and socialization of the true common carriers are inevitable. This issue's leading editorial suggests what can be done to protect the genuine common carriers in the performance of their vitally essential function.

MAIL CONTAINERS FOR PARCEL POST—collapsible, palletized, strong wire cages—have proved themselves in severe service tests, and another 1,000 are on order. For a progress report, in pictures, of their use on the Great Northern, Milwaukee, Pennsylvania, and New York Central, see page 60.

K.C.S. FACILITIES AT NEW ORLEANS have been improved by construction, just outside the city, of a new mechanical terminal, including adequate arrangements for servicing and maintaining diesel-electric locomotives and for substantial car repair activities. Two articles in this issue (pages 45 and 50) are devoted to an explanation of the layout and details about the important structures in the terminal area, and to a description of some of the ingenious appurtenances that expedite the operations performed there.

POLICE WORK IS A PROFESSION nowadays, not just a "cinder dick" job, says the Illinois Central's President Wayne Johnston, who outlines that road's methods of selecting and training railway police officers in one of this week's feature articles (page 56).

In Washington . . .

RECORD CAPITAL EXPENDITURES by the railroads in 1951, forecast in these pages a year ago, are now expected to total about $1.4 billion, according to estimates from carriers summarized in the latest I.C.C. bureau "Monthly Comment," which is the subject of a leading news article this week. The previous peak year was 1949, when the total was around $1.3 billion. Next year's capital expenditures will start out on a still higher basis, the estimates indicate, and first quarter outlays shape up at around 27 per cent more than 1951's first quarter.

WEEK AT A GLANCE

GARNERED FROM THE NEWS: Firemen's "emergency board" continues proceedings in absence of firemen.—Intercity Christmas mail movement by train to break all records.—I.C.C. to reopen Ex Parte 175 rate increase hearing January 14.—Conductors' union appeals for "arbitration" of wage-case settlement plan it rejected.—Low-fare "air coach" operators urged by C.A.B. to expand service.—D.T.A. reports continuing effort to protect freight car program from other interests seeking steel.—Emergency board in "non-op" open-shop case hears carrier and brotherhood viewpoints expounded.—John L. Rogers to be I.C.C. chairman in 1952.

. . . And Elsewhere

GOVERNMENT OWNERSHIP for the Southern Pacific of Mexico may be in the cards, according to the Department of Communications of the Mexican government. If the government goes through with its proposals the 1,348-mile S.P. of M.—Nogales to Guadalajara and branches—would be incorporated with the National of Mexico.

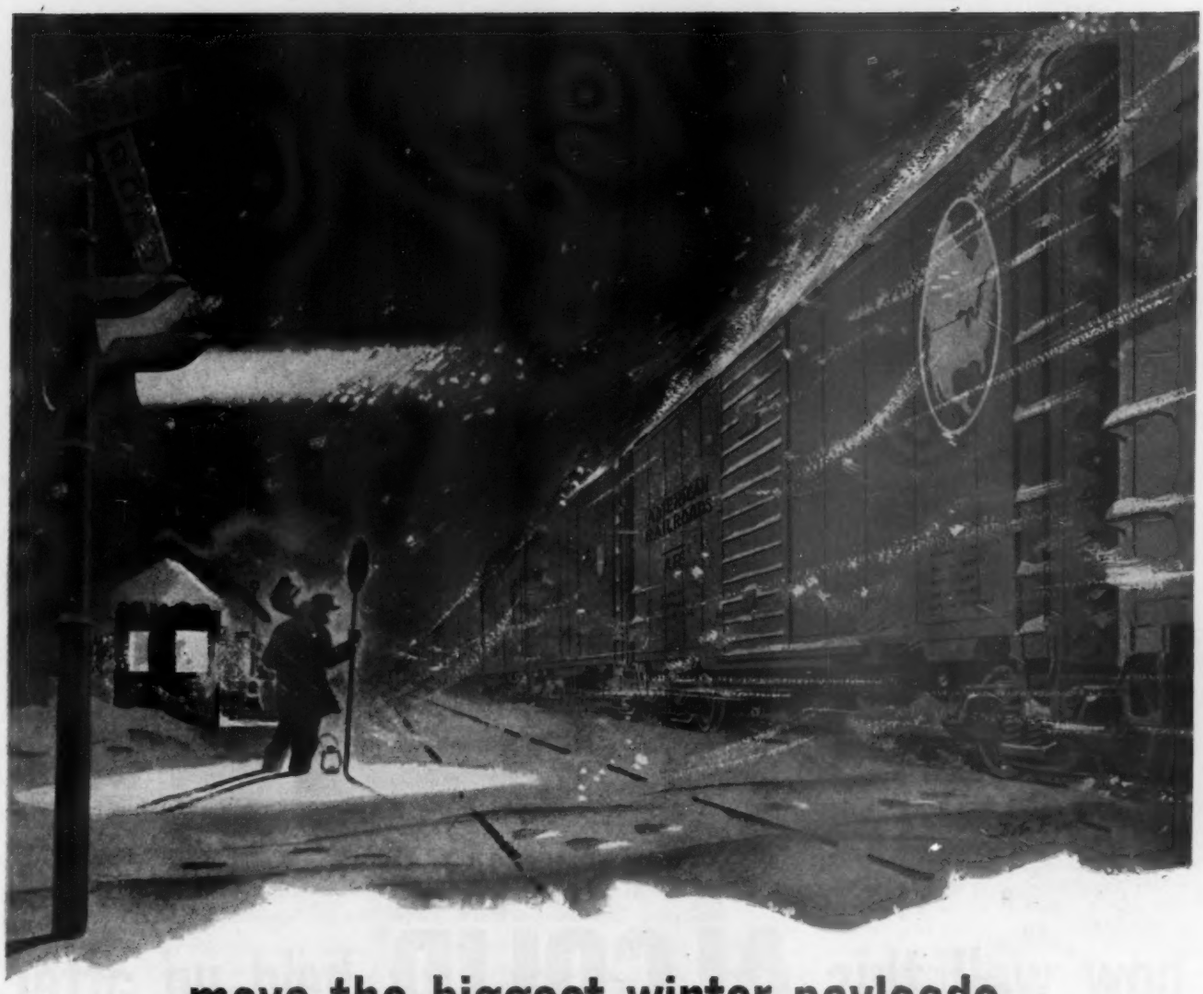
THE DESPERATE NEED for more citizens to exercise their right to vote and for more individuals to urge our elected representatives to help curb bureaucratic extravagance, were the high points of a dramatic analysis of ever-increasing federal taxes, by Nordberg Manufacturing Company's Henry H. Talboys, at a recent meeting of New York's Metropolitan Maintenance of Way Club. By using visual aids, Mr. Talboys carried his audience through a down-to-earth factual exposition of our ever-increasing tax burden and its effect on the American way of life. Don't miss it if Henry's address is scheduled for your neighborhood!

"MISTER Q.A.&P." will retire on December 31. Charles H. Sommer (above), who has been associated with the small but very active Quanah, Acme & Pacific for the past 46 years and its president since 1925, will culminate a career of almost 57 years of continuous railroad service when he retires at the end of this month. His lengthy tenure of office places him very close to the top of the seniority roster of American railroad presidents. Mr. Sommer will continue his active interest in the company (a subsidiary of the St. Louis-San Francisco) through service on the board of directors. His successor will be Quin K. Baker, who has been vice-president of the Texas short line since 1946.

SO MANY RAILROAD MEN PLAY SANTA CLAUS during the Christmas season that it is perhaps unfair to pick out any individual for special mention. But a bouquet, nevertheless, to L. P. Kennedy, general superintendent of the Norfolk Southern at Raleigh, who, with the cooperation of his own company and the Seaboard Air Line, is arranging special trains to take children from North Carolina orphanages to an Air Force Christmas party at Pope Field.

"NEEDLESS AND CRUEL WASTE" of high-priced meat is blamed squarely on irresponsible independent livestock truckers in a recent feature article in This Week magazine, syndicated Sunday supplement of many of the nation's leading newspapers. The worst crime, says the article, is "gambling on overloaded vehicles, particularly those transporting mixed stock. As the driver takes sharp turns or bounces over deep ruts in the road, the lighter animals, such as sheep, are brutally crushed and sometimes suffocated by the cattle and hogs. Heavier beasts often fall and are unable to get up. In the confusion they can be seriously injured or trampled to death."

JUST TO SHOW what operators of big commercial trucks would like the taxpayers to do for them—a recent article in Transport Topics advocates spending nearly $12 billion on the so-called 40,000-mile interstate highway system. This expenditure, says the truckers' publication, should be entirely on the interstate highways which the big truckers principally use. The near-$12 billion figure includes nothing for city streets, secondary highways or rural or farm-to-market roads, which may be of more than passing interest to the automobile owner and the small trucker who would be soaked for most of the $12 billion.



move the biggest winter payloads

Here's why America's Railroads have standardized on the solid journal bearing

MAXIMUM DEPENDABILITY: In high speed service, a record of 42,000,000 car miles without a "heating."

LOWEST ACCELERATING AND RUNNING RESISTANCE: Glides on a single film of oil, like a skater on ice.

EASE OF MAINTENANCE: Can be fully inspected or replaced *on the line.* No shopping required.

UNIVERSAL INTERCHANGEABILITY: Simple—dependable—economical—safe.

LIGHT WEIGHT: Saves many tons of excess dead weight on every moving train.

ROCK BOTTOM COST: Saves over 25% on initial *car* cost—96% on bearing replacement.

...because cars are Solid-Bearing-Equipped!

Zero and below!

That's when you're really stuck—iced tracks, locomotive slippage, sanded rails—a hundred other cold-born things to contend with. Sure, the train load has to be cut.

But if you didn't have solid journal bearings, you would have to cut it even more! Because that's when, compared to so-called "anti-friction" bearings, *there's far lower resistance for the standard AAR bearing you now use . . .* that's when it actually takes up to 33% less power to operate a standard bearing over a 350-mile run.

Identical tests of the different type bearings—with all conditions of temperature, load and speed completely controlled—have proved it.

FOR THE COMPLETE FACTS on AAR Solid Bearings, write for your copy of Bulletin 1001.

MAGNUS METAL CORPORATION

Subsidiary of **NATIONAL LEAD COMPANY,** *New York, Chicago*

SEE FOR YOURSELF

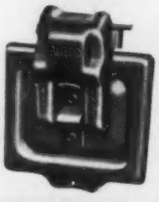
how well this ALCOLID® held up after

251,811 MILES OF SERVICE

Take a closer look at the unretouched photograph. Notice the smoothness and absence of uneven wear in the area where the cover seated against the box. This kind of tight closure is vivid proof of the effectiveness of ALCOLID design.

For 251,811 miles—the equivalent of 17 years of freight service—the articulated cover was held in position by a sturdy torsional spring. The square-headed retaining pin was securely held in place by a flanged hood ear. This prevented any pin rotation or eye elongation.

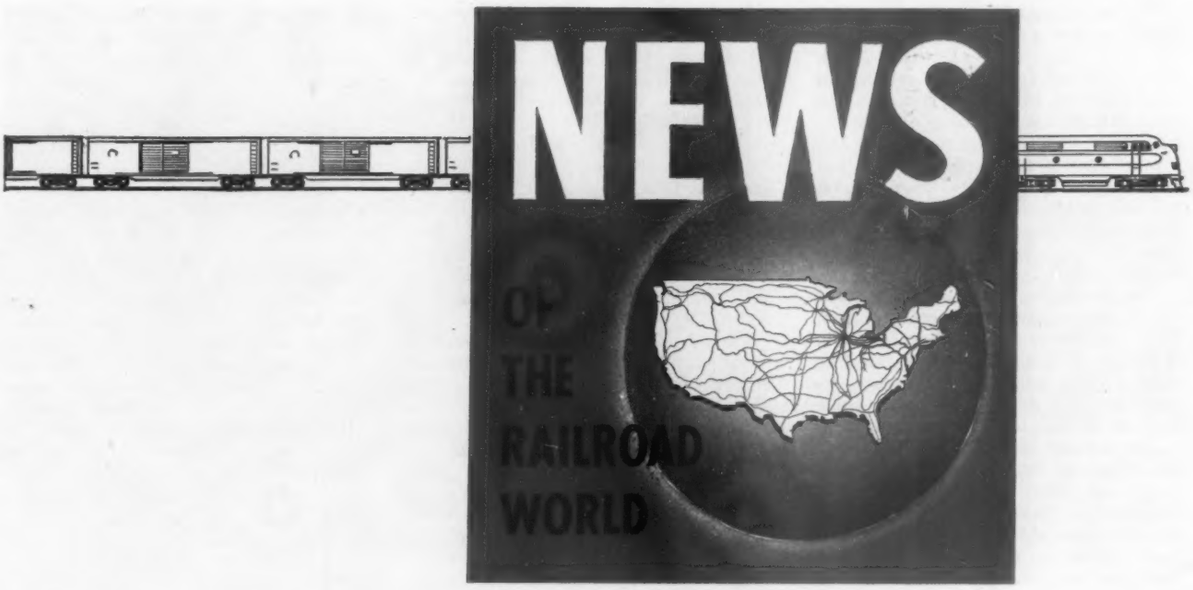
Put ALCOLID—designed for a lifetime of service—to work for you. Send for complete details to your Alco sales representative in New York, Cleveland, Chicago, St. Louis, St. Paul, San Francisco.



ALCOLID

RAILWAY STEEL-SPRING DIVISION

AMERICAN LOCOMOTIVE COMPANY



This Year's Capital Expenditures Will Reach All-Time Peak of $1.4 Billion

I.C.C. "Monthly Comment" indicates further rise in 1952; also shows deterioration of railroads' working-capital position

Gross capital expenditures made by Class I line-haul railroads in 1951 are expected to total about $1.4 billion, an all-time high, and next year's first-quarter outlays are expected to be on a basis 27.4 per cent above that of this year's first quarter. These forecasts, based on reports from railroads, were made in the latest "Monthly Comment" issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

Other articles in the issue included a review of changes in railway capital structure since 1920, an analysis of trends in relationships between transportation revenues and national income, and a report on railroads' working-capital position on September 30. The latter pointed up the deterioration of that situation compared with September 30, 1950, the drop in net working capital, excluding materials and supplies, having been 46.4 per cent.

Actual Expenditures

The $1.4 billion figure for 1951's gross capital expenditures was built up on the basis of actual expenditures made by 131 roads during the first nine months and fourth-quarter estimates submitted by 127 of those roads. The four roads which did not furnish fourth-quarter estimates made third-quarter expenditures totaling $13.8 million. The bureau's compilation of the carrier reports is shown in the accompanying table, reproduced from the "Comment."

The previous peak was the $1.3 billion reported for 1949. The 1950 expenditures totaled $1.07 billion.

The article on net corporate working capital showed that for Class I roads as a whole "quick assets" (cash and temporary cash investments) declined from $1,954.8 million on September 30, 1950, to $1,698.8 million on September 30, 1951, a drop of 13.1 per cent. This year's September 30 ratio of quick assets to total current liabilities was 77.5, compared with 97.0 on September 30, 1950. On that date railroads in the Southern region and Western district had ratios over 100.

On Septemer 30, this year, the highest territorial ratio was the Southern region's 85.2. The others were: Eastern district, 66.3; Pocahontas region, 77.1; Western district, 83.6.

Actual and estimated gross capital expenditures
Class I line-haul railways

Period	Number of roads	Expenditures for roads	Expenditures for equipment	Total
		Thousands	Thousands	Thousands
Actual:				
January—September 1950	131	$194,427	$573,686	$768,113
October—December 1950	131	92,016	205,713	297,729
Total 1950	131	286,443	779,399	1,065,842
January—September 1951	131	247,258	752,080	999,338
Estimated:				
October—December 1951[1]	127	104,006	309,812	413,818
Actual and estimated:				
Total 1951	...	351,264	1,061,892	1,413,156
Actual:				
First quarter 1951	131	67,109	215,137	282,246
Estimated:				
First quarter 1952[1]	127	83,364	276,118	359,482
Percent of change:				
Jan.—Sept. 1951 vs. same period in 1950—Actual	...	+27.2	+31.1	+30.1
Year 1951 (actual and estimated) vs. 1950	...	+22.6	+36.2	+32.6
First quarter1952 (estimated) over same period in 1951 (actual)	...	+24.2	+28.3	+27.4

[1]Estimates not furnished by 4 roads whose actual expenditures in the third quarter of 1951 amounted to $4.7 million for road and $9.1 million for equipment.

The net corporate working capital (total current assets less toal current liabilities) for Class I roads as a whole declined from $1,579 million on September 30, 1950, to $1,384.4 on the same date this year, a drop of 12.3 per cent. The 46.4 per cent drop in the "excluding-materials-and-supplies" figure brought that down from $881.6 million to $472.6 million. For the Eastern-district roads, this figure was down 73.4 per cent—from $248 million to $66 million.

The materials and supplies account for all roads combined increased from $697.4 million on September 30, 1950, to $911.8 million on the same date this year. "This increase presumably reflects in some degree the higher price level in 1951," the bureau said.

The data on changes in railway capital structure between 1920 and 1950 were interpreted by the bureau as indicating a "marked improvement" in the structure during the 30-year period. While it was noted that 1920 was the year in which the commission was given jurisdiction over issuance of railway securities, it was also recognized that financial reorganizations and voluntary debt reduction by many carriers had a "marked effect" in reducing railroad capitalization.

The figures showed that investment in road and equipment increased between 1920 and 1950 by 48.9 per cent—from $19.8 billion to $29.6 billion. The accrued depreciation reported in 1950 was $6.6 billion, compared with $1.1 billion in 1920, in which connection the bureau noted that mandatory depreciation for fixed roadway property did not become effective until January 1, 1943.

Total railroad capital actually outstanding decreased from $20.2 billion in 1920 to $18.9 billion in 1950, a drop of 6.5 per cent. The decline in funded debt was 14.5 per cent—from $11.4 billion to $9.7 billion. Meanwhile, capital stock was up 3.9 per cent—from $8.8 billion to $9.2 billion. In 1920, capitalization was on the basis of 101.9 per cent of investment in road and equipment. The 1950 basis was 64 per cent. Funded debt in 1920 was equivalent to 57.4 per cent of the investment, compared with 32.9 per cent in 1950.

The article on transportation revenues and national income indicated how air lines have improved their relative position since 1939 while railroads have lost ground relatively. On the basis of 1939 as 100, the national-income index for 1950 was 329.7, the railroad-revenue index was 236.7, and the air-line index 996.8. Moreover, as the bureau noted, revenues of air lines were "somewhat understated," because they covered only scheduled carriers, omitting non-scheduled lines.

Railroad revenues in 1950 were equivalent to four per cent of the national income, a drop of 1.6 percentage points from the 1939 figure of 5.6 per cent. Meanwhile, revenues of scheduled air lines were equivalent to 0.2 per cent of 1950's national income, compared with 0.1 per cent in 1939.

In contrasting the railroad and airline situations, the bureau calculated that the latter increased their revenues "about three times as rapidly as national income" while railroad revenues grew at a rate only two-thirds that of the increase in national income. Meanwhile, truck revenues moved upward at a rate about 1 1/3 times the national-income pace, and bus operators and pipe lines just about held their own.

Proving Necessity for Freight Car Program Is D.T.A. Preoccupation

Agency's review of year's work says nothing calls for change in 10,000-car monthly goal

Because the freight car program "has been questioned and challenged by sources who are interested in diverting critical materials into other channels," the Defense Transport Administration has been engaged in a continuing effort "to prove and keep proved the vital necessity for this program, and to insure its being carried out to the greatest practicable extent."

That's what D.T.A. said in a "record of operations" for the period from September 9, 1950, to September 30, 1951. The "record," a report occupying 62 double-spaced pages of typing, was made public December 10.

NEW CITY TICKET OFFICE recently opened by the Union Pacific at Beverly Hills, Cal., features "conference desks" rather than traditional ticket counter. Located at 9571 Wilshire boulevard, the new structure has a heavy glass door that opens automatically upon the slightest touch of the vertical chromium bar. Book-type tickets are issued to passengers for almost all transactions. The cell-ceiling hides the source of illumination and provides a diffused light

CZECHOSLOVAKIAN TRAIN DISPATCHER Karel Truksa (right), who helped plan the memorable escape of a train through the "Iron Curtain" into the American zone of Germany last September, recently inspected the movement bureau of the Pennsylvania in Pennsylvania Station, New York. With Mr. Truksa here are T. A. Archipley (seated), dispatcher on the P.R.R.'s New York division, and E. E. Large, movement director. Mr. Truksa and the engineman of the train which carried them to the democratic world are now in this country, with their families, as employees of the Lionel Corporation

The discussion of the freight car program noted that the production goal of 10,000 cars per month has not been met "because of many adverse factors, which include shortage of critical materials, adverse weather conditions, failure to deliver allocated materials, and work stoppages." But developments throughout the year under review "have not changed the evident necessity for this program," the report insisted.

"At the end of [D.T.A.'s] first year," it added, "it appears that a better understanding of the program that railroad steel requirements will has been established, and it is hoped be more fully met in the ensuing months so that no serious shortage of railroad transportation will occur. Without question, however, the railroad freight car program will continue to be one of this agency's major concerns so long as the present emergency exists."

Figures in the report showed that 57,000 cars had been built under the program as of September 30. This figure "is far below the more than 90,000 cars which the schedule calls for," the report added.

It went on to discuss the locomotive situation, recalling that "a. . .program, fully documented as to necessity and calling for 1,200 diesel units and 15 steam locomotives per quarter," was presented to the National Production Authority "early in 1951." As to performance on the program, the report said 1,483 new locomotives (1,471 diesels) were delivered in this year's first seven months. It then sounded this warning note:

"The loads now being handled per freight train and the utilization of freight locomotives are at all-time peaks. While some further improvement in performance may be expected in the event of substantial traffic increases. . . .the extent of such improvement would undoubtedly be small. To a considerable degree, additional freight traffic could only be handled by increasing the number of trains operated, and not by further increases in train loads or train speeds. In the case of passenger traffic, there is now a considerable margin of reserve capacity in regular trains, but requirements of the armed forces for organized troop movements would undoubtedly call for operation of additional passenger trains. More trains, whether freight or passenger, mean increased locomotive requirements."

Earlier in the report, D.T.A. had asserted that construction of new rolling stock and "adequate maintenance" offered the "only real solution" to the problem of freight car shortages. There also D.T.A. expressed its belief that "it is demonstrable that railroad operations are presently being conducted at a high degree of efficiency compared with previous years."

In its further comment on "efficient use of existing equipment," the report referred to proposals that D.T.A. impose heavy-loading requirements with respect to l.c.l. freight. The report explained that "no practical order has as yet been devised," but the matter receives "continued attention."

Meanwhile, the report's "outlook-for-the-future" section had promised that the use of orders or other types of restrictive action "will be confined to those instances where the national defense would otherwise be affected adversely, and where voluntary action on the part of industry is impracticable because of legal obstacles or where it will not accomplish the necessary results."

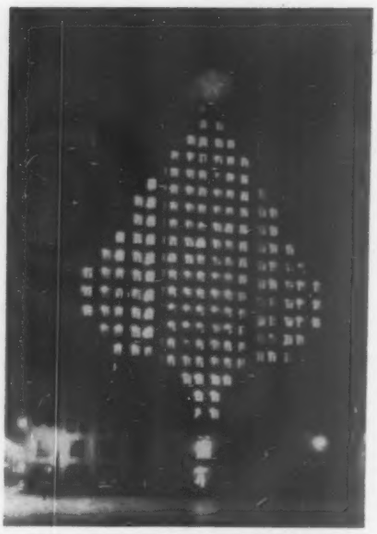
This approach, the report added, "places a great responsibility upon shippers, carriers, and the traveling public to see that they give of their best efforts in voluntary cooperation. Restraint and provident use of facilities will go far toward obviating the need for future controls."

Other parts of the report dealt with D.T.A.'s non-railroad activities, such as those in highway and water transport, warehousing and storage, and port utilization. A foreword by Administrator James K. Knudson acknowledged the "cooperation and support" given to D.T.A. programs by other government agencies particularly the Interstate Commerce Commission.

O. R. C. Asks Army for Arbitration Of Stalemated Wage and Rules Case

Other developments include more mediation in B.L.E. case and more emergency-board hearings in B.L.F.&E. dispute

An Order of Railway Conductors' appeal to Secretary of the Army Pace for arbitration of its wage and rules case, further mediation proceedings in the Brotherhood of Locomotive Engineers' case, and continuation of the emergency-board hearings in the Brotherhood of Locomotive Firemen & Enginemen's case, were developments of the past week in the long-



A HALLMARK OF CHRISTMAS for St. Louisans is this 22-story "tree" of light in the Missouri Pacific's general office building facing Civic Plaza. The "tree" has been a feature of the St. Louis Christmas scene since 1929, except during wartime years, when "brownout" restrictions prevented it

stalemated disputes involving operating employees represented by those unions.

Meanwhile, some attention has been given recently to demands for pension payments supplemental to those available under the Railway Labor Act, which have been made on the Missouri Pacific by the B.L.E. and by other unions on one or two other western roads. The National Mediation Board has asked the unions and roads concerned to submit briefs on the question of whether or not supplemental pension payments can be made a matter for collective bargaining under the Railway Labor Act.

The O.R.C. request for arbitration was made in a December 7 letter which the union's president, Roy O. Hughes, sent to Secretary Pace. It was the strike threat posed by the O.R.C. and Brotherhood of Railroad Trainmen, after they had refused to accept recommendations of an emergency board, which prompted President Truman to seize the railroads in August, 1950. The carriers have since been under Army operation, and the B.R.T. case has been settled.

The issues passed upon in the emergency board report which it rejected are those which the O.R.C. now wants arbitrated. It was Mr. Hughes' contention that agreement to arbitration was the "duty" of the government," as the operator of the railroads."

Mr. Hughes' letter also referred to what he called the "low ebb" of employee morale. "The mounting dissatisfaction and unrest among these railroad employees cannot be ignored," he warned Secretary Pace. "Efficient and safe operation depends to a large degree upon high employee morale. We would be less than realistic if we did not express to you our concern that the recent toll of accidents on American railroads has been due in part to this factor."

On December 12, the Department of Defense's information office said that the Hughes letter had been received by Secretary Pace; and that the O.R.C. president's request was "under consideration."

As to the further mediation proceedings in the B.L.E. case, these meetings under the auspices of the Mediation Board were continuing as this issue went to press. Meanwhile, the B.L.E. request for appointment of an emergency board has been held in abeyance. (*Railway Age* of December 10, page 11.)

As reported in the issue of December 3, page 11, the B. of L. F. & E. walked out on the emergency board which President Truman appointed to hear its case. Thus the hearings of the past week were additional sessions held to receive railroad management's presentation. Members of this board are Chairman Carroll R. Daugherty, George Cheney, and Andrew Jackson.

Railroad witnesses have included Frederic B. Whitman, president, Western Pacific; L. W. Horning, vice-president, New York Central; C. D. Mackay, assistant vice-president, Southern; W. S. Baker, assistant vice-president, Atlantic Coast Line; E. B. Perry, assistant vice-president, New York, New Haven & Hartford; and John J. Sullivan, manager of personnel, Southern Pacific.

President Whitman of the W. P. urged the board to uphold "the pattern of settlements already reached with other groups of employees." Explaining that road and yard crews consist of members of four or five "op" unions who work as a unit, Mr. Whitman went on to contend that "little benefit can be derived from rules changes without uniform adoption by the several unions involved."

As to "make-work" rules, the W.P. president said "it is far past the time that the employees should grant some concessions as to the meaning and application of working rules, some of which were written 50 years ago." Because of the "substantial concessions" offered by the carriers, the employees "should make some concessions in return," he went on.

Further testimony with respect to rules was given by the other carrier witnesses. The rules in issue include those relating to the changing of switching limits, the establishment of inter-divisional runs, the right to set back the reporting time of road crews when trains are delayed, and the performance of more than one class of service by road crews.

Roads Challenge Legality Of Union-Shop Agreements

Say board has "legal duty" to ask unions to withdraw

The emergency board investigating the union-shop dispute between railroads and non-operating employees has a "legal duty" to recommend that unions withdraw their request for union-shop agreements, Donald R. Richberg, counsel for some 25 southeastern railroads, said in a December 11 statement before the board.

Mr. Richberg told the board that the Railway Labor Act amendment passed by Congress in January of this year did not amend provisions of the act which still make the union shop illegal.

He referred specifically to those provisions which forbid any limitation upon "freedom of association;" which establish the right of employees to designate their representatives "without interference, influence or coercion" by their employer; and which permit employees "to organize and bargain collectively through representatives of their own choosing."

"The agreement sought is not merely a new type of 'yellow-dog contract' by which the employer agrees to compel all new employees to join a union. The proposed agreement is actually a 'slave labor contract' by which the employer agrees also to compel all existing employees to become members of a union and to continue to pay its dues and assessments," Mr. Richberg declared.

Lester P. Schoene, counsel for the non-ops, told the board the 17 non-op unions involved in the dispute consider the issue to be this: "Shall the free riders be compelled to support the union, or shall the union be compelled to carry the free riders?"

Mr. Schoene charged the carriers with refusing to follow "accepted and established procedure" by their "consistent refusal" to handle the union-shop dispute on a joint national basis. He asked the board to recommend settlement of the dispute through "joint national conferences."

Mr. Richberg, who in 1926 helped write the original Railway Labor Act, said four amendments to the Constitution—the First, Fifth, Ninth, and Thirteenth—would be violated if the act attempted to authorize a majority of employees to compel a dissenting minority to join, support, and accept servitude to a private organization.

The 1951 amendment to the act "is only permissive and only then to the extent of permitting the making of a lawful agreement between one carrier and the duly authorized representative of its employees," Mr. Richberg said. "The amendment cannot be construed to grant permission to a group of car-

riers and a group of unions to negotiate a national agreement which would be unlawful."

Other railroad counsel presenting opening-day statements, in addition to Mr. Richberg, included M. C. Smith Jr., general solicitor of the Erie, who spoke for about 40 eastern roads; C. A. Miller, vice-president and general counsel of the American Short Line Railroad Association, who has been retained by some 30 short lines; and J. I. Hardy, solicitor of the Southern, representing his own road.

Mr. Smith said eastern roads represented by him are opposed to the union-shop proposal because it fails to provide "safeguards" which should be the key to any agreement. These safeguards will be spelled out during the testimony by "three or four" witnesses for the eastern carriers.

The non-op demand fails to include "exemption" provisions for "confidential managerial employees," or for positions in executive offices, Mr. Smith said. He added that his roads also consider the union shop "improper" on grounds outlined by Mr. Richberg, and said he would, in presenting his case, urge the board to recommend "wholly against" the non-op proposal.

Mr. Miller said the 30 roads he represented "want no part of it (union shop and check-off) in any manner, shape or form." He told the board that no person "should have to pay tribute to a labor union as a condition of employment." Both he and Mr. Hardy, of the Southern, adopted Mr. Richberg's views as to the "doubtful constitutionality" of the union shop.

Howard Neitzert, who will present the case for several western carriers, was detained at another emergency board—the one hearing the dispute between the railroads and the Brotherhood of Locomotive Firemen and Enginemen.

George M. Harrison, president of the Brotherhood of Railway Clerks, and George E. Leighty, president of the Order of Railway Telegraphers, were lead-off witnesses as the unions began presentation of their case before the board.

Mr. Harrison told the board that railroads are opposing the union shop because they want to keep the employees divided and thereby play the non-members against the members in collective bargaining negotiations. He cited testimony by carrier representatives before Congress, when the union shop legislation was being considered, as proof that management "actually uses those nonmembers as a source of information relative to union activities."

The primary purpose of the union-shop proposal is to eliminate the free rider, Mr. Harrison said. Other benefits to be derived, for the good of the carriers as well as the unions, include higher morale of employees, reduction of representation disputes, and less complaint about the negotiation of contracts and handling of grievances, Mr. Harrison declared.

Mr. Leighty charged the railroads with taking advantage of a tense world situation in refusing to bargain for the union shop. He said they refused to enter into nation-wide bargaining, "violating a pattern of action which has been in force since 1932."

The emergency board hearing the dispute is composed of three members: Chairman David L. Cole, George E. Osborne, and Aaron Horvitz. The Washington, D. C., hearings, which opened December 11, are scheduled to continue through December 18, then recess for the holidays.

Several carriers will be absent from the emergency board proceedings, having previously negotiated union-shop agreements with one or more of the non-op unions. A total of 34 roads have entered such agreements, including 23 in the East, ten in the West and one in the Southeast.

Railroads Appeal I.C.C. Order in Seatrain Case

Forty-one railroads have gone to court in an effort to set aside the Interstate Commerce Commission order authorizing Seatrain Lines to establish service between New York and Savannah, Ga. The roads filed suit in U. S. District Court, Alexandria, Va., on November 26, contending that if they are required to furnish freight cars for Seatrain they will suffer "irreparable loss."

Judge A. V. Bryan denied the carriers' request for a temporary injunction against Seatrain. He asked the chief judge of the court to create a three-judge panel to hear the case. No date has been set for hearings.

As noted in *Railway Age* of November 19, page 16, Seatrain was authorized to establish "temporary" New York-Savannah service until next May, while the I.C.C. decides whether the service should be authorized permanently.

RRs Modernize in Spite Of Low Earnings—Faricy

Railroads of the United States are meeting demands of defense and civil production requirements only because in the past five years, despite earnings that have set low records, they have spent $6 billion in modernization, W. T. Faricy, president of the Association of American Railroads, told the annual dinner of the New York Railroad Club on December 6.

Included in the program to keep the railway system efficient at any cost or sacrifice, Mr. Faricy said, has been procurement of 400,000 new freight cars and 13,000 new units of locomotive power. Yet in the face of costs that have doubled or more, and of earnings lower than those of any other essential industry, he added, railroad revenues have been limited by government regulation to a level only about 45 per cent greater per ton-mile than in 1939.

"There has been created a tremendous imbalance between what the railroads take in and what they pay out. By any standard of measurement it is obvious that present earnings are falling far short of what is needed to enable railroads to be kept in the strength and health to provide the kind of service the nation needs now and in the future to meet the expanding de-

BOYS' RAILROAD CLUB, a weekly series of eight 15-minute television film programs, was sponsored by the A. C. Gilbert Company, of New Haven, Conn., makers of toy trains and other scientific toys, over the DuMont network during November and December. The programs included actual railroad films, as well as shots of boys working on scale model railroads. Railroad guest on the first of the eight programs was P. A. Archipley, P.R.R. dispatcher at New York

mands of commerce and the national defense."

Unqualified agreement with this conclusion was expressed in individual statements of other railroad presidents —Gustav Metzman of the New York Central, Walter S. Franklin of the Pennsylvania, R. B. White of the Baltimore & Ohio, Walter J. Tuohy of the Chesapeake & Ohio, and P. W. Johnston of the Erie—who were present or represented at the club dinner.

Freight Car Loadings

Loadings of revenue freight in the week ended December 8 totaled 773,520 cars, the Association of American Railroads announced on December 13. This was a decrease of 48,256 cars, or 5.9 per cent, compared with the previous week; an increase of 6,625 cars, or 0.9 per cent, compared with the corresponding week last year; and an increase of 104,695 cars, or 15.7 per cent, compared with the equivalent 1949 week.

Loadings of revenue freight for the week ended December 1 totaled 821,776 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, Dec. 1

District	1951	1950	1949
Eastern	138,390	119,343	121,523
Allegheny	167,691	116,232	133,083
Pocahontas	66,956	54,106	47,412
Southern	140,802	134,764	121,379
Northwestern	105,074	108,113	83,789
Central Western	136,051	139,686	121,642
Southwestern	66,812	67,921	65,095
Total Western Districts	307,937	315,720	270,526
Total All Roads	821,776	740,165	693,923
Commodities:			
Grain and grain products	58,694	55,022	49,251
Livestock	10,950	11,809	11,989
Coal	175,456	132,607	139,443
Coke	16,974	11,931	12,096
Forest products	47,526	47,122	41,010
Ore	41,672	34,589	19,508
Merchandise l.c.l.	73,669	79,408	83,827
Miscellaneous	396,835	367,677	336,799
December 1	821,776	740,165	693,923
November 24	711,447	701,551	664,555
November 17	814,435	837,458	758,972
November 10	791,403	839,880	635,823
November 3	837,743	863,149	578,981
Cumulative total 48 weeks	37,797,094	36,013,019	33,483,811

In Canada.—Carloadings for the week ended December 1 totaled 84,903 cars, compared with 86,221 cars for the previous week, and 81,400 cars, for the corresponding week last year, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
December 1, 1951	84,903	34,162
December 2, 1950	81,400	33,009
Cumulative totals for Canada:		
December 1, 1951	3,883,217	1,654,375
December 2, 1950	3,617,833	1,504,895

Meehanite Prize to Paper On Journal Housing Design

One of the prize winners in a casting design contest conducted by the Meehanite Metal Corporation, New Rochelle, N. Y., was Henry Hubbell, of the Fafnir Bearing Company, New Britain, Conn., for his paper on "Railway Journal Housing." Mr. Hubbell won the fourth of six prizes offered by the Meehanite company in the contest, which was open to design engineers in manufacturing plants using castings, and was aimed at uncovering facts pointing to new uses and applications of Meehanite castings and problems solved by their specification.

U.P. ACCIDENT SCENE NOT C.T.C. TERRITORY

In reporting the head-on collision between two Union Pacific freight trains at Orchard, Idaho, on November 25, *Railway Age* stated that this accident occured in C.T.C. territory. This statement, based on information furnished by the railroad, has since been corrected; train movement at the accident scene was actually governed by automatic block signals and not by centralized traffic control.

War Traffic Makes Itself Felt in the Southeast

A. G. T. Moore, traffic manager of the Southern Pine Association, pointed out the danger of strikes and slowdowns in the railway and other industries at a dinner tendered to the Southeast Shippers Advisory Board by the Greater Miami Chamber of Commerce, at Miami Beach, Fla., on December 4. His remarks were substantiated by the evidence of T. M. Healy, district manager of the Car Service Division of the Association of American Railroads, at the 96th regular meeting of the board on December 6. Mr. Healy cited instances of 22 open-top cars that were tied up for 95 days and 73 others that have been tied up for the 163 days and are still unavailable, because of refusal of strikers to permit switch engines to cross their picket lines at the industries affected, despite appeals made to the labor leaders.

The meeting, which was presided over by Louis A. Schwartz, general manager of the New Orleans Traffic & Transportation Bureau, as general chairman, was told that, apart from these instances, the car supply in the southeast is much better than it has been for some time. Both Thomas E. Haile, assistant manager of the Growers & Shippers League, Orlando, and W. A. Stebbins, traffic manager of the Minute Maid Corporation, Plymouth, Fla., predicted, however, acute shortages in car supply for the coming sea-

NATIONAL ASSOCIATION OF RAILROAD WOMEN OFFICERS for the coming year posed for the photographer in the patio of La Fonda, Santa Fe, N. M., during the association's eighth annual meeting. Founded in Chicago during 1944 because of the need for women to handle problems arising from wartime travel conditions, the association now comprises some 50 women who have achieved positions of influence on 21 Class I railroads and six allied industries. The new officers, from left to right, are: Eleanor Rundquist, secretary (superivisor, personnel bureau, employee relations department, Pullman Company); Norma Thompson, president (supervisor, courier-nurse department, Santa Fe); Hazel Williams, second vice-president (special representative, traffic department, Minneapolis & St. Louis); Inez DeVille, retiring president (associate editor, Baltimore & Ohio Magazine); Edith Alden, first vice-president (secretary and assistant treasurer, Chicago, Burlington & Quincy); and Hazel Thompkins Porter, member-at-large (convention traffic agent, Canadian Pacific). Absent from the picture was the association's treasurer, H. Luiese Jones, who is interior designer for the Seaboard Air Line

son. Replying for the railways, J. L. Cook, general superintendent of transportation of the Seaboard Air Line, stated that the railways own 660 more refrigerator cars than last season and have 1,600 others on order, which have been delayed for lack of steel. He promised that, with improved handling methods, this supply should be adequate, except perhaps during the peak of the season, when the railways would guarantee special service, if necessary, to keep citrus shippers supplied with cars.

E. W. Coughlin, manager of the C.S.D.'s Railroad Relations section, stated that railways and organized shippers are doing "a good job" of car handling—that an increase of 5 per cent in loadings, plus 2 per cent in mileage per trip, is being handled with an increase of only 2 per cent in cars available. He warned, however, that coming months may show a different picture, since, because of slow deliveries of steel, the railways are still 106,000 cars short of their car ownership goal. If steel allocations are continued as at present, he added, achievement of that goal will take 30 months, rather than 20, as originally scheduled. He commended the Southeast board's executive committee for making a direct appeal to defense administrators for greater steel allocations for railway cars.

While the organized shippers, with car efficiency committees are doing a splendid job, at larger points, Mr. Coughlin stated that a large percentage of the nation's freight cars are unloaded at small stations where such committees do not exist. He urged the necessity of reaching shippers and railway men at such small stations with the message of more efficient car handling.

Albert Green, special representative of the A.A.R.'s Freight Claim Division, commended shippers and railways for their interest in loss and damage prevention, but warned that continual watchfulness, care and training are essential.

The luncheon meeting of the board on December 6 was addressed by Legh R. Powell, Jr., president of the Seaboard.

The next meeting of the board will be at Savannah, Ga., March 19-20, 1952.

Seatrain Sues 12 Railroads, Asks $164 Million Damages

Accusing 12 eastern railroads of "conspiracy" and violation of the Sherman Antitrust Act, and seeking monetary damages of more than $164,163,000 from four of the 12, Seatrain lines, Inc., filed suit on December 10 in the United States District Court at Trenton, N. J., and also named as defendants seven railroad associations.

Seatrain, in a 52-page complaint, charged the railroads have "conspired to deprive the public and industry of widespread opportunity to enjoy lower freight rates for raw materials and finished goods, by conspiracy restricting and preventing Seatrain's growth and development in interstate commerce." The complaint says "the conspiracy has thus far injured not only Seatrain, but to a far greater extent the public, by depriving industries and communities of more efficient and economical and lower-cost transportation."

The suit named as "primary defendants," from which monetary relief is sought, the Pennsylvania, the Atlantic Coast Line, the Louisville & Nashville, and the Southern. Other roads which the complaint seeks to have enjoined and prevented from further "conspiring against" Seatrain are the Lehigh Valley, the Baltimore & Ohio, the Seaboard Air Line, the St. Louis-San Francisco, the New York Central, the Erie and the Delaware, Lackawanna & Western. Associations named as defendants are the Association of American Railroads; the Presidents' Traffic Conference; the Eastern Railroads Traffic Executive Association; the General Freight Traffic Committee—Eastern Railroads; and the Freight Traffic Committee of New England, Trunk Line and Central Territory railroads.

The suit sets forth that, "except for the conspiracy," Seatrain would have been able to build and put in service at least eight additional ships out of its own income after taxes, including the earnings from such additional ships. The monetary damages of $164,163,000 which it seeks from the four "primary" defendant railroads is derived from the $54,721,000 which, Seatrain says, would have been the earnings it would have enjoyed from use of the additional ships it would now have in service but for the "conspiracy." This sum is tripled, as is the usual practice in seeking damages under the Sherman Act.

A SEVEN-CAR BALTIMORE & OHIO TRAIN—including 5 diners, one lounge car and a baggage car—entering the Baltimore warehouse of the Hill-Chase Steel Company during ceremonies attending recent opening of the steel firm's new $500,000 steel and aluminum distributing plant. A tour of the plant for visitors, then cocktails and dinner, were on the program. The dining cars were fully staffed with stewards, waiters and chefs, who prepared and served meals to 1,000 guests in three sittings

Mexico to Have New Electric Plant

Mexico will have a new plant, expected to be in operation by December 15, to produce electric cars, electric locomotives, trolley buses and generating and other electrical equipment. The new firm is a subsidiary of the Belgian Charleroi works; Alex Saccard, branch office manager of the Belgian firm in New York, is acting for the new Mexican branch as well.

MORE NEWS ON PAGE 66

Additional general news appears on page 66, followed by regular news departments, which begin on the following pages:

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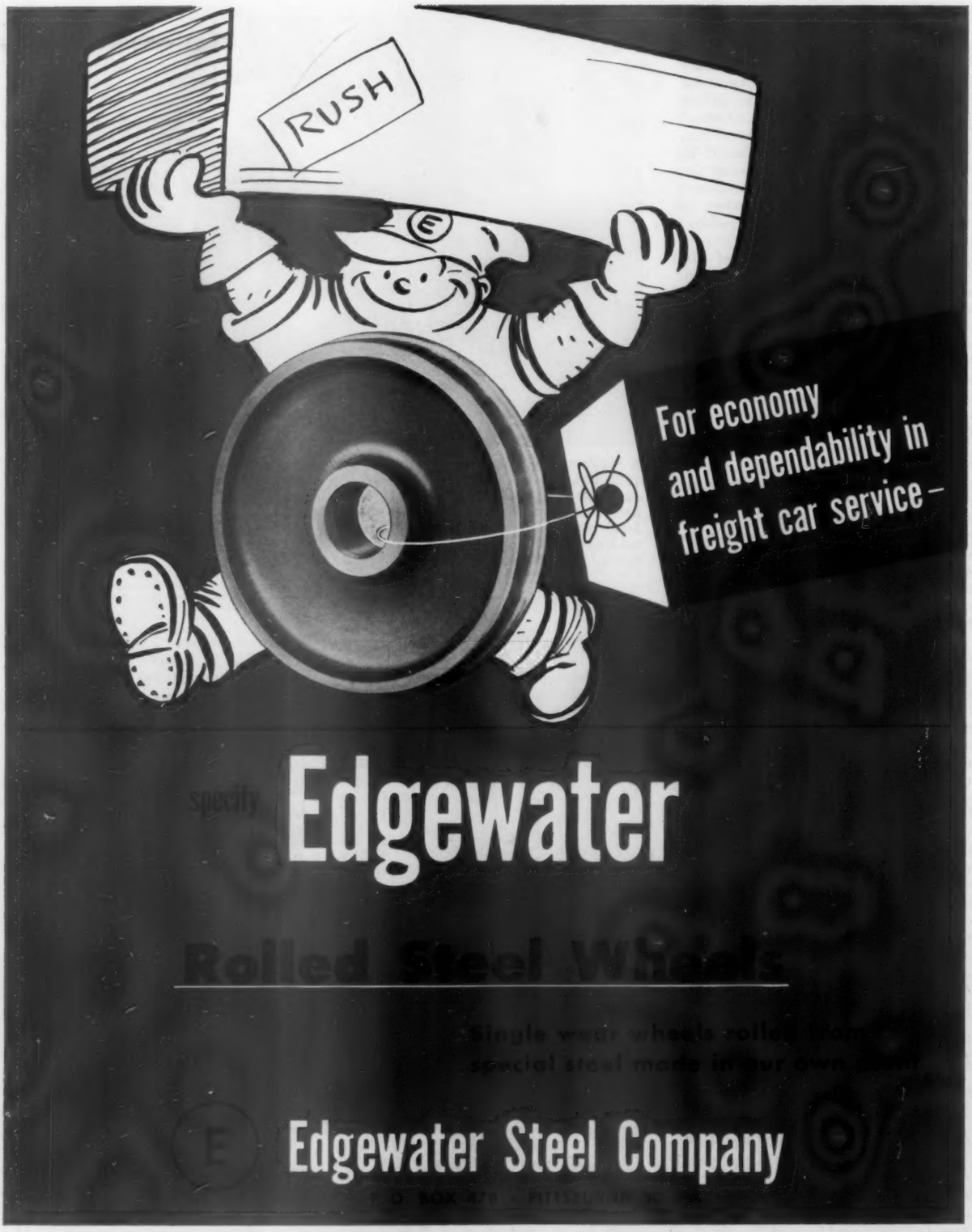
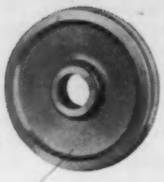
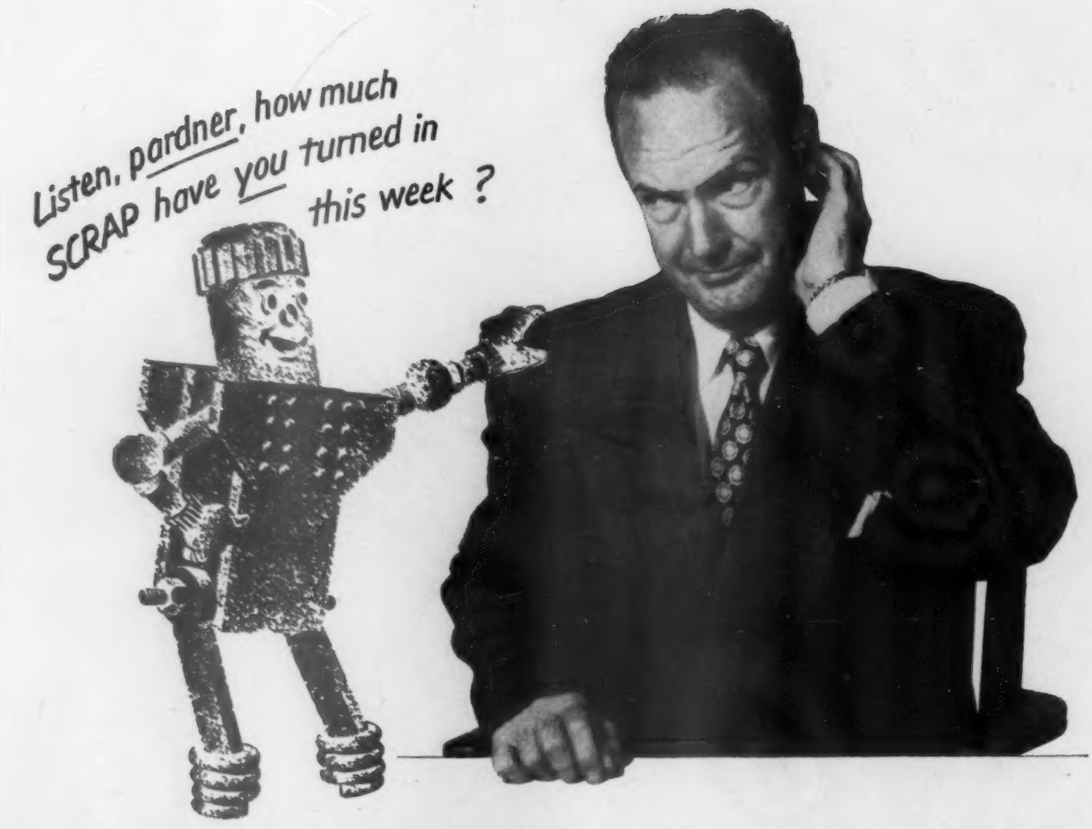
Railway Officers	74



Makers of Freight Car Passenger Car  and Diesel Locomotive
Rolled Steel Wheels

W. H. MINER, INC. • CHICAGO



Today, the steel business is your business

—*it needs all your SCRAP, Now!*

SUPPOSE that every steel user were suddenly told that he had to turn in a half-ton of scrap before he could get a ton of steel. It would start the most gosh-almighty treasure hunt for scrap that ever happened.

In effect, this "no-scrap, no-steel" situation virtually exists. For without *all* the scrap that industry can search out and start on its way to the mills, steel production will surely drop. It's as serious as that.

More scrap is urgently needed. Today the mills are turning out more steel than ever before. But they're scraping the bottom of the barrel as far as scrap is concerned. Defense and domestic demands for steel simply cannot be met unless at least 100,000 tons of "purchased" scrap roll into the furnaces—*every day.*

The bulk of this scrap must come from industry. That's why we're asking for your all-out help. That's why it's so important that you make the drive for scrap part of your daily operations. Make it your business to encourage every employee to report any obsolete, broken or worn-out machinery, tool or equipment that has seen its day. From this dormant "junk" must come the heavy melting scrap that the mills need most. Don't let your scrap lie idle; send it on its way. How about it, pardner?

You'll find your local scrap dealers listed in the yellow pages of the phone directory.

This page would ordinarily be used to tell you about

U·S·S HIGH STRENGTH STEELS

but, because without SCRAP we cannot produce steel, we are asking instead for your all-out help in getting more SCRAP to the mills.

AMERICAN STEEL & WIRE COMPANY, CLEVELAND
COLUMBIA STEEL COMPANY, SAN FRANCISCO · NATIONAL TUBE COMPANY, PITTSBURGH
TENNESSEE COAL, IRON & RAILROAD COMPANY, FAIRFIELD, ALA. · UNITED STATES STEEL COMPANY, PITTSBURGH
UNITED STATES STEEL SUPPLY COMPANY, WAREHOUSE DISTRIBUTORS, COAST-TO-COAST
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UNITED STATES STEEL

FLANNERY MANUFACTURING COMPANY
BRIDGEVILLE, PENNSYLVANIA

SCENE: *Model 10* AUTOMATIC SIGNAL IN ACTION

Unseen—by the impatient motorist—is an onrushing second train, concealed by the first. But there's no danger here of a dreaded "second train accident." Model 10's flashing lights will *continue* to operate, and the barrier arm will *remain* down until both trains have cleared the crossing.

Unseen—something that can't be illustrated: Model 10 *dependability*. Model 10's operate unfailingly, even when temperatures are extremely high or low... and regardless of snow or sleet. Moreover, Model 10's are on the job 24 hours a day—never go "off duty."

Unseen—the safety record established by Model 10's: Since 1936, thousands of these signals have been placed in operation at busy crossings, and *not a single accident has ever occurred as a result of operation failure.*

Unseen—the considerable dollar-and-cents economies effected by Model 10 protection. The low cost of Model 10 installation, operation, and maintenance is written in the records of a hundred railroads.

There's much more to tell about Model 10 safety and economy. Write for 748-RA12.

CERTIFICATE OF MERIT for Safety AWARDED WESTERN RAILROAD SUPPLY CO. BY THE NEW YORK WORLD'S FAIR OF SCIENCE AND INDUSTRY

WESTERN RAILROAD SUPPLY COMPANY

General Offices and Factory:
2428 SOUTH ASHLAND AVENUE • CHICAGO 8, ILLINOIS

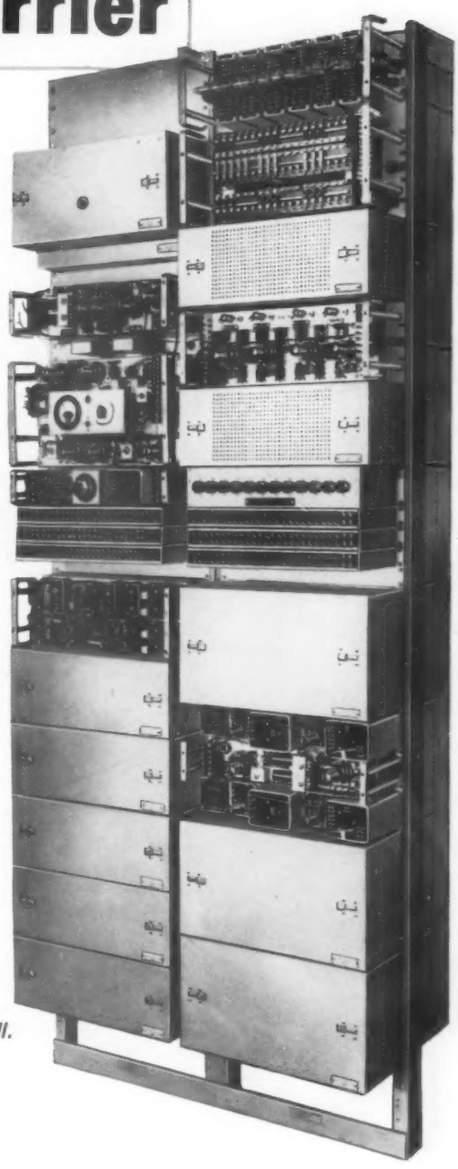
get all the economy of carrier circuits!

you can add up to 12 telephone circuits with

Lenkurt type 42-C carrier

Even though you now have the maximum number of low-frequency carrier circuits, you can still add this economical, performance-engineered, Lenkurt Carrier! Operating in the high-frequency (36-148 kc) range, the Lenkurt Type 42-C Carrier system makes available up to 12 additional high-quality voice circuits that will not interfere with the low-frequency circuits you now have.

Automatic Electric thus offers you *more* communication circuits—*more* carrier economy—by making fuller use of the carrier frequency spectrum. You can "stack" 4 or 8 channels of Type 42-C Carrier on your existing open-wire circuits to meet your present needs, and have reserve channels for future growth, without costly new pole-line construction. Send for complete information today!



Lenkurt Type 42-C Carrier—
completely mounted and wired on standard relay racks, ready to install.

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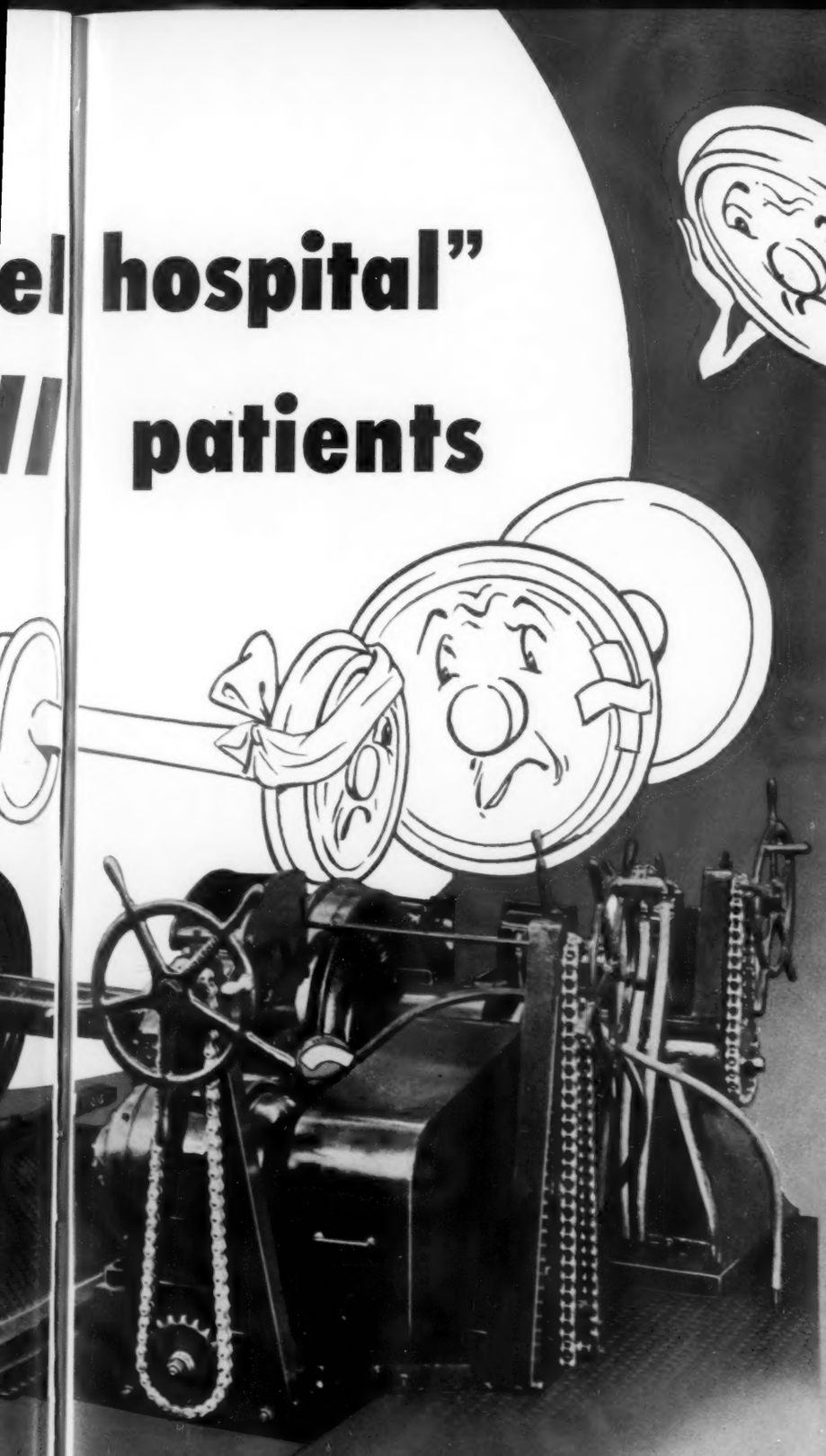
This "wheel h
treats all

● A.C.F.'s high speed wheel tread grinder handles both chilled and steel car wheels from 24" to 45" in diameter!

Grinds tapered wheel treads with ease! A simple adjustment is all you need to change the grinding angle. A.C.F.'s multi-purpose grinder also accommodates all sizes of axle lengths.

Grinds and smooths to rigid specifications! The instantly available, abrasive dresser precision-squares the grinding wheel face... gives your wheels absolute tread concentricity, smooth rail surfaces!

el hospital"
// patients



It's hard to find a wheel that A.C.F.'s high speed wheel tread grinder can't handle! This specially engineered machine grinds *all* commonly used wheels for freight and passenger cars, as well as diesel locomotives! Wheels ranging from 24" to 45" in diameter are ground to perfect concentricity in a matter of minutes!

Actually, A.C.F.'s extremely accurate wheel tread grinder is indispensable to any maintenance shop. In wheel salvage alone this highly efficient machine more than pays for itself. In addition, it serves as an ideal instrument for detecting and correcting imperfections in wheels or faulty workmanship in boring, mating, and mounting. For a complete folder of specifications, write to:
American Car and Foundry Company,
New York • Chicago • St. Louis
Cleveland • Philadelphia
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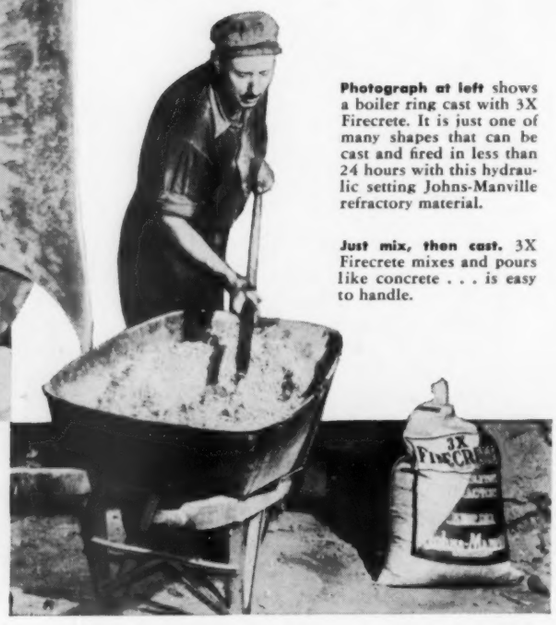
a.c.f.

CAR BUILDERS TO AMERICA'S RAILROADS

NOW... Get refractory shapes like this faster, at lower cost...



Photograph at left shows a boiler ring cast with 3X Firecrete. It is just one of many shapes that can be cast and fired in less than 24 hours with this hydraulic setting Johns-Manville refractory material.

Just mix, then cast. 3X Firecrete mixes and pours like concrete . . . is easy to handle.

. . . cast them yourself with 3X FIRECRETE

WITHIN 24 hours you can have ready for use any refractory shape you need—and save money as well—by casting it yourself with monolithic, hydraulic setting Johns-Manville 3X Firecrete*.

You'll find that Firecrete mixes and pours as easily as concrete . . . and hardens quickly with negligible drying and firing shrinkage. It has high resistance to spalling, too. And it is designed to withstand soaking temperatures of 3000F . . . to meet the high operating temperatures encountered in railroad service today.

Furnished in 100-pound bags for convenient handling and storage, 3X Firecrete is *available for immediate delivery.* Why not write us today for further information on how it can solve *your* refractory problem? Address Johns-Manville, Box 290, New York 16, N. Y.

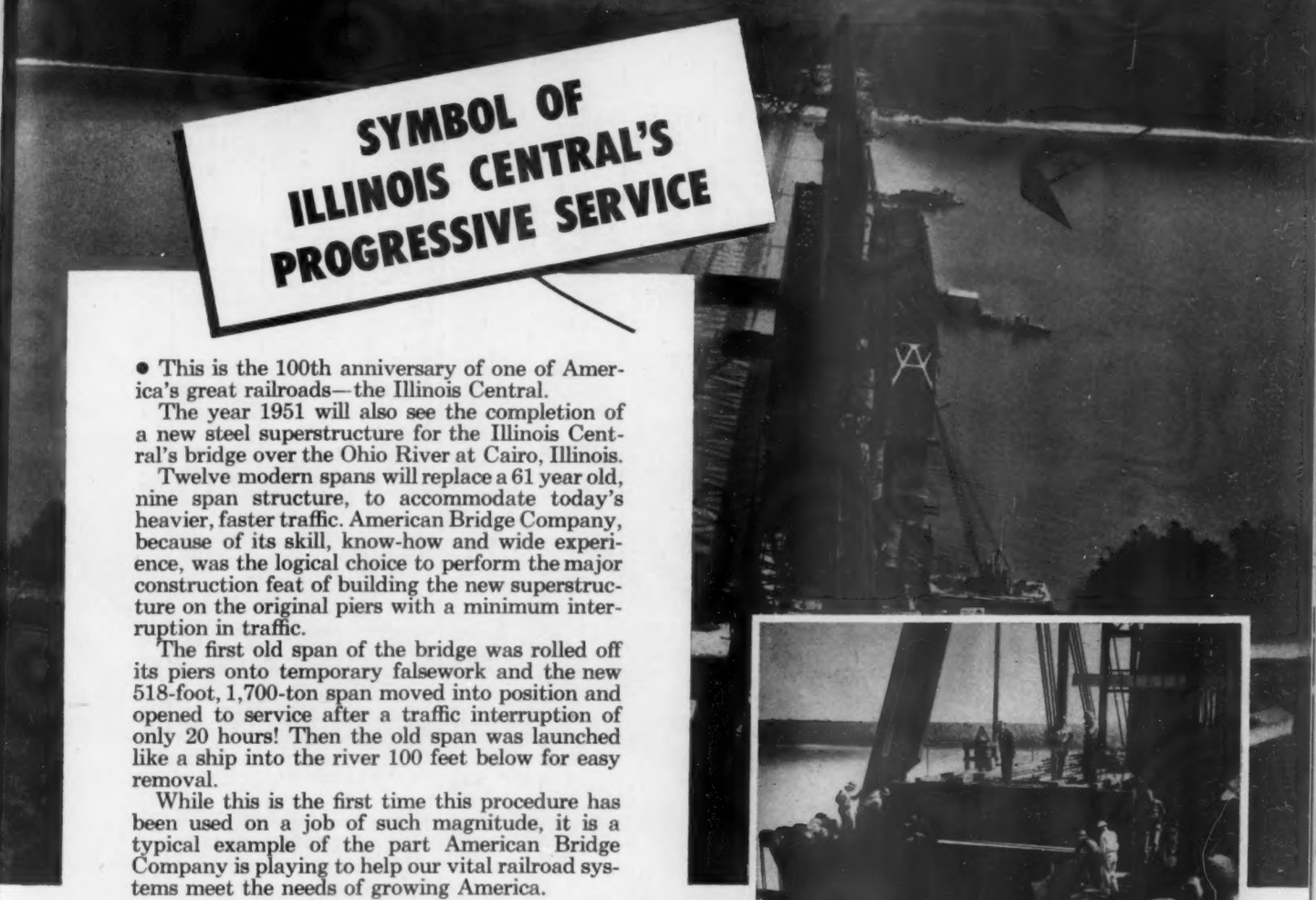
*REG. U. S. PAT. OFF.

JOHNS MANVILLE JM PRODUCTS **Johns-Manville**

93 YEARS OF SERVICE TO TRANSPORTATION

BRIDGE MODERNIZATION AT CAIRO

SYMBOL OF ILLINOIS CENTRAL'S PROGRESSIVE SERVICE



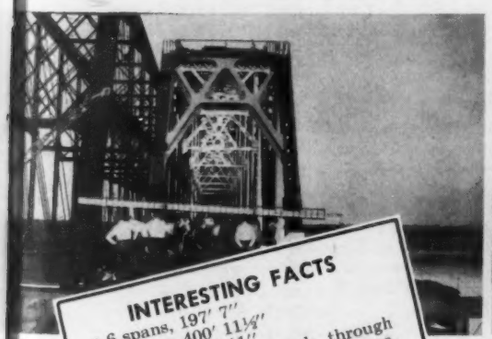
• This is the 100th anniversary of one of America's great railroads—the Illinois Central.

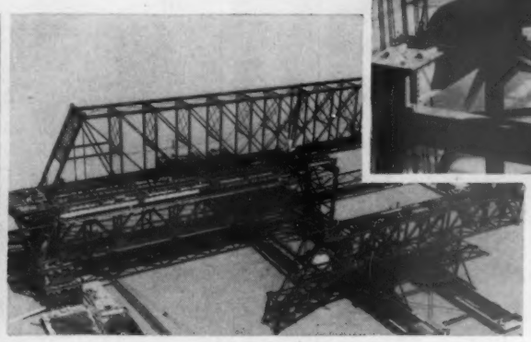
The year 1951 will also see the completion of a new steel superstructure for the Illinois Central's bridge over the Ohio River at Cairo, Illinois.

Twelve modern spans will replace a 61 year old, nine span structure, to accommodate today's heavier, faster traffic. American Bridge Company, because of its skill, know-how and wide experience, was the logical choice to perform the major construction feat of building the new superstructure on the original piers with a minimum interruption in traffic.

The first old span of the bridge was rolled off its piers onto temporary falsework and the new 518-foot, 1,700-ton span moved into position and opened to service after a traffic interruption of only 20 hours! Then the old span was launched like a ship into the river 100 feet below for easy removal.

While this is the first time this procedure has been used on a job of such magnitude, it is a typical example of the part American Bridge Company is playing to help our vital railroad systems meet the needs of growing America.





FOOT BY FOOT the old span, 60-ft. high and weighing 1,100 tons, is rolled over to rest on launching sleds atop temporary falsework. From this position it was launched into the Ohio 100 ft. below. **LEFT:** Falsework span No. 2 erected complete and jacked to elevation prior to floating. FAR LEFT: New span rolls into position four hours after movement started.

INTERESTING FACTS

- 6 spans, 197′ 7″
- 4 spans, 400′ 11½″
- 2 spans, 518′ 11″
- Bridge was single track, through truss. Steel used. 10,000 tons.
- Erecting procedure: Illinois Central R. R. and American Bridge Company.
- Consulting Engineers: Modjeski and Masters.

AVAILABLE NOW! *For showing in churches, schools, clubs and industries, the new sound and color motion picture—BUILDING FOR THE NATIONS—a candid, factual photographic record in full color of the highlights of the fabrication and erection of the United Nations' Secretariat Building in New York City.*

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UNITED STATES STEEL EXPORT COMPANY, NEW YORK

USS TRADE MARK

AMERICAN BRIDGE

UNITED STATES STEEL

REVENUES AND EXPENSES OF RAILWAYS

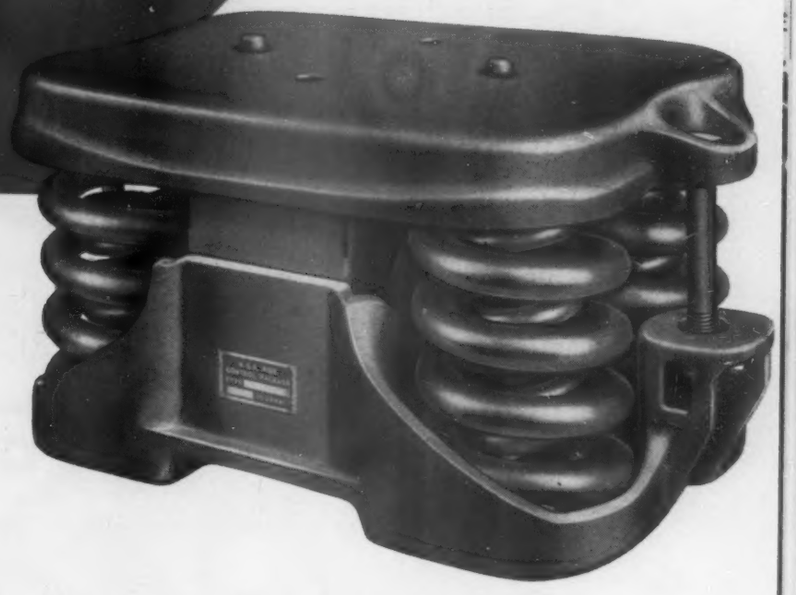
MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1951

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating Expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income 1951	Net railway operating income 1950
Akron, Canton & Youngstown	Oct.	171	516,373	.....	532,556	78,457	51,993	32,548	142,413	333,725	62.7	198,831	108,040	63,156	65,895
	10 mos.	171	4,623,606	554	4,797,631	704,345	482,436	341,612	1,407,559	3,227,357	67.3	1,570,274	719,440	561,327	608,905
Atchison, Topeka & Santa Fe System	Oct.	13,096	44,290,362	4,010,117	52,544,848	8,304,913	8,735,516	1,207,910	16,380,491	36,698,428	69.84	15,846,420	—3,727,346	19,503,208	10,093,103
	10 mos.	13,096	384,352,213	42,903,799	463,831,584	77,594,487	89,570,495	11,418,067	156,254,430	354,451,248	76.42	109,380,336	50,523,155	56,962,725	61,405,392
Atlanta & St. Andrews Bay	Oct.	82	311,843	2,091	319,797	26,705	20,177	8,103	64,844	135,140	42.3	184,657	85,494	72,818	55,878
	10 mos.	82	2,902,938	21,059	2,994,141	330,905	202,336	80,998	618,468	1,374,370	45.9	1,619,771	849,019	501,301	522,846
Atlanta & West Point	Oct.	93	316,718	36,017	406,494	45,253	54,549	15,787	163,270	303,917	74.8	102,577	50,961	35,690	55,856
	10 mos.	93	2,844,292	479,110	3,741,936	469,429	562,534	155,563	1,633,944	3,067,790	82.0	674,146	357,209	129,601	181,092
Western of Alabama	Oct.	133	330,280	34,968	401,556	57,333	56,240	15,831	141,998	294,643	73.4	106,913	62,077	40,157	88,280
	10 mos.	133	3,024,993	464,829	3,791,788	526,299	624,756	158,775	1,409,172	2,948,703	77.8	843,085	478,054	292,393	323,831
Atlantic & Danville	Oct.	205	189,165	.....	192,819	54,000	18,469	11,928	58,510	153,930	79.8	38,889	9,200	9,525	18,450
	10 mos.	205	1,476,382	.....	1,508,089	321,000	107,923	104,326	536,036	1,187,229	78.7	320,860	91,077	67,607	74,483
Atlantic Coast Line	Oct.	5,453	10,558,413	1,259,314	12,692,767	1,743,142	3,145,934	346,661	4,568,081	10,377,683	81.8	2,315,084	1,700,000	565,334	228,079
	10 mos.	5,453	104,593,588	16,696,120	130,117,054	25,044,868	27,270,858	3,351,263	48,916,775	110,421,768	84.9	19,695,286	12,475,000	4,652,223	6,439,013
Charleston & Western Carolina	Oct.	343	480,389	7,270	510,992	133,599	121,231	17,491	164,534	450,218	88.1	60,774	30,000	27,030	33,114
	10 mos.	343	5,123,810	79,372	5,366,057	1,377,083	848,759	169,987	1,668,860	4,192,796	78.1	1,173,261	550,000	529,925	411,596
Baltimore & Ohio	Oct.	6,187	35,455,942	2,115,455	40,124,502	5,934,991	8,358,913	889,351	15,274,187	31,949,185	79.6	8,175,317	3,230,173	3,802,765	3,768,072
	10 mos.	6,187	330,627,845	21,428,732	374,512,121	50,222,182	83,936,285	8,398,869	149,377,857	306,649,075	81.9	67,863,046	27,190,957	29,683,037	30,115,249
Staten Island Rapid Transit	Oct.	29	284,579	50,589	339,054	47,827	39,033	1,501	167,627	284,870	84.0	54,184	35,681	—5,537	—34,513
	10 mos.	29	2,409,754	498,751	2,961,990	487,441	371,113	14,504	1,512,318	2,667,671	90.1	294,319	354,546	—229,089	—427,704
Bangor & Aroostook	Oct.	602	707,626	34,242	776,939	204,835	165,195	15,802	247,196	689,538	88.8	87,401	73,903	58,512	21,132
	10 mos.	602	8,066,893	366,316	8,805,546	1,921,012	1,766,439	146,814	2,487,165	6,924,471	78.6	1,881,075	1,074,930	932,894	1,738,669
Bessemer & Lake Erie	Oct.	212	3,000,518	977	3,027,450	187,609	1,229,862	18,499	566,082	2,107,953	69.6	919,497	1,217,007	—130,790	639,713
	10 mos.	212	25,018,816	10,102	25,298,876	1,997,358	8,315,841	186,758	5,302,031	16,703,461	66.0	8,595,415	6,982,647	3,668,086	4,475,229
Boston & Maine	Oct.	1,702	6,205,844	902,649	7,845,893	1,308,738	1,159,126	122,501	3,194,041	6,136,308	78.2	1,709,585	824,762	546,146	706,863
	10 mos.	1,702	56,810,057	9,512,654	73,016 848	12,843,295	11,801,510	1,127,016	31,412,513	60,405,247	82.7	12,611,601	6,165,955	2,957,119	5,055,700
Cambria & Indiana	Oct.	35	159,582	.....	159,650	28,398	76,268	99	27,608	138,859	87.0	20,791	90,706	40,507	90,596
	10 mos.	35	1,346,766	.....	1,347,230	144,167	824,017	1,148	254,926	1,302,442	96.7	44,788	655,809	534,811	547,233
Canadian Pacific Lines in Maine	Oct.	234	310,087	45,469	383,251	128,127	77,801	7,354	100,278	385,921	100.7	—2,670	28,023	—69,901	—55,631
	10 mos.	234	4,477,119	442,721	5,188,632	1,082,317	845,180	72,169	1,974,658	4,094,606	78.9	1,094,026	276,386	286,286	—200,899
Canadian Pacific Lines in Vermont	Oct.	90	184,912	19,564	224,056	49,548	30,828	6,112	130,848	225,037	100.4	—981	13,253	—68,082	—69,196
	10 mos.	90	1,931,475	141,883	2,252,829	531,980	316,882	59,843	1,194,985	2,178,769	96.7	74,060	126,569	—600,654	—838,058
Central of Georgia	Oct.	1,815	3,152,391	177,701	3,622,357	558,631	554,245	123,528	1,522,907	2,944,425	81.3	677,932	212,502	400,641	264,088
	10 mos.	1,815	30,104,445	2,613,399	35,373,556	6,176,649	5,854,904	1,224,376	15,613,932	30,782,870	87.0	4,590,686	2,431,988	1,520,947	1,163,300
Central of New Jersey	Oct.	410	3,285,530	479,027	4,016,069	644,536	653,267	58,495	1,858,733	3,382,537	84.2	633,532	413,437	—128,750	9,742
	10 mos.	410	29,074,399	4,833,694	36,379,467	5,074,176	6,208,868	564,341	18,590,169	32,077,148	88.2	4,302,319	4,010,610	—3,244,021	—2,321,971
Central of Pennsylvania	Oct.	208	1,830,121	4,386	1,877,656	238,223	452,173	24,041	539,864	1,296,807	69.1	580,849	87,063	769,728	891,366
	10 mos.	210	15,760,867	63,127	16,222,261	1,756,992	3,864,296	250,265	5,107,392	11,387,330	70.2	4,834,931	921,424	6,754,564	8,058,136
Central of Vermont	Oct.	422	852,000	45,000	970,000	155,951	128,194	14,157	407,130	744,793	76.8	225,207	45,426	87,904	101,275
	10 mos.	422	8,368,000	572,000	9,599,000	1,802,112	1,550,657	153,059	3,984,883	7,891,981	82.2	1,707,019	451,600	644,938	543,392
Chesapeake & Ohio	Oct.	5,117	33,178,050	707,542	35,631,358	4,423,419	6,908,874	576,669	10,719,350	23,841,917	66.9	11,789,441	7,142,673	4,979,256	5,943,948
	10 mos.	5,116	283,788,564	7,613,529	305,238,071	40,223,413	61,128,554	5,608,833	100,508,500	219,248,138	71.8	85,989,933	50,097,976	39,201,201	41,376,275
Chicago & Eastern Illinois	Oct.	886	2,485,180	250,960	3,167,997	440,118	489,222	116,618	1,093,669	2,303,708	72.7	864,289	398,300	375,448	517,484
	10 mos.	886	22,380,046	2,840,182	27,850,205	3,919,880	4,346,180	1,113,428	10,475,484	21,385,641	76.8	6,464,564	2,645,000	2,722,351	3,154,941
Chicago & Illinois Midland	Oct.	130	877,091	184	899,117	119,270	165,774	27,897	262,463	617,477	68.7	281,640	139,348	114,866	290,927
	10 mos.	130	7,598,120	2,039	7,783,282	1,075,110	1,586,394	271,013	2,214,651	5,542,725	71.2	2,240,557	1,144,433	754,980	2,102,933
Chicago & North Western	Oct.	7,913	15,560,819	1,709,873	19,134,496	2,962,671	2,773,799	326,212	8,332,057	15,265,455	79.8	3,869,041	1,088,559	2,359,126	1,564,369
	10 mos.	7,910	133,841,046	18,475,668	169,117,829	27,275,704	31,427,759	3,423,421	79,107,036	149,534,540	88.4	19,583,289	10,692,517	4,767,650	5,877,132
Chicago, Burlington & Quincy	Oct.	8,825	20,648,456	1,497,318	24,251,903	4,298,539	3,255,278	464,756	8,033,180	16,843,296	69.5	7,408,607	3,951,621	2,936,613	5,050,307
	10 mos.	8,823	183,429,542	15,774,518	218,864,363	35,215,020	32,572,190	4,499,956	77,781,935	157,742,723	72.1	61,121,640	32,485,753	23,550,997	26,562,263
Chicago Great Western	Oct.	1,474	2,842,858	12,049	3,062,975	529,050	383,669	107,264	969,655	2,078,988	67.9	983,987	362,012	339,276	310,834
	10 mos.	1,474	26,465,215	269,632	28,319,090	4,959,377	4,210,891	1,010,101	9,465,638	20,470,153	72.3	7,848,937	2,423,790	2,493,266	2,986,393
Chicago, Indianapolis & Louisville	Oct.	541	1,912,122	68,625	2,101,671	314,476	257,439	80,659	672,172	1,421,058	67.6	680,613	286,395	275,074	325,959
	10 mos.	541	15,901,106	780,755	17,757,211	3,066,910	2,785,285	854,151	6,348,279	14,023,324	79.0	3,733,887	1,399,116	1,280,279	1,730,930
Chicago, Milwaukee, St. Paul & Pacific	Oct.	10,671	22,285,694	1,470,236	26,227,437	2,827,977	4,297,019	465,401	9,726,277	18,344,431	69.9	7,883,006	3,989,000	3,348,068	3,769,140
	10 mos.	10,671	182,364,677	16,230,438	220,357 861	31,886,939	43,524,009	4,619,028	94,369,966	184,736,495	83.8	35,621,366	19,319,000	10,740,836	15,701,392
Chicago, Rock Island & Pacific	Oct.	7,917	14,687,678	1,526,153	17,801,275	2,754,694	2,479,107	452,089	6,299,704	12,741,260	71.6	5,060,015	2,314,201	2,077,448	2,013,685
	10 mos.	7,922	133,022,094	16,763,071	163,461,887	24,928,523	25,526,061	4,648,894	64,114,617	127,225,616	77.8	36,236,271	15,510,784	12,297,979	14,908,778
Chicago, St. Paul, Minn. & Omaha	Oct.	1,617	2,679,689	173,442	3,101,008	508,217	401,883	66,472	1,502,349	2,616,511	84.4	484,497	190,799	131,979	426,592
	10 mos.	1,617	23,734,136	1,936,629	27,827,929	4,549,035	4,232,943	632,705	14,840,729	25,551,821	91.8	2,276,108	1,848,945	—1,389,608	1,070,825
Clinchfield	Oct.	317	2,009,922	1,060	2,019,922	303,923	371,444	39,593	462,387	1,216,209	60.2	803,713	258,741	716,124	880,539
	10 mos.	317	19,407,204	13,372	19,521,103	2,674,436	3,209,491	389,348	4,402,335	11,007,745	56.4	8,513,358	2,042,706	8,001,602	6,835,826

THIS NEW and BETTER

A-S-F RIDE-CONTROL® PACKAGE

gives you greater strength
... integral friction surface
... simpler installation



The A-S-F Ride-Control Package has been redesigned and re-engineered to give you even longer life and simpler installation—in addition to all its well known features. Here are the changes:

Top and bottom plates have been completely redesigned for greater strength and longer service life. This results from A-S-F's program of constant product development and improvement.

Friction-surfaces are now built right into the lower plate, which is cast alloy steel with flame-hardened friction surfaces. Years of performance already prove beyond question that Ride-Control friction wear is negligible; friction plates do not require replacement; so friction surfaces are now integral with the bottom plate.

Installation has been simplified. In the old design, springs were held under compression by a bar, to be removed after installation to permit maximum spring travel. In the new Package, an ingenious arrangement holds the springs under compression. Small blocks mounted on a spring strip are set between bolt washers and the underside of the bottom plate. At the first pressure of car weight or the first service bump, the springy strip snaps these blocks out from between bolt washer and plate, permitting full floating spring travel. It's proof against forgetfulness!

GIVES OLD FREIGHT CARS AN EASIER RIDE

The new easy-to-install Ride-Control Package applies the famous A-S-F Ride-Control principle to existing freight cars. It gives 2½ to 3 inches of spring travel in place of the old AAR-standard 1⅜ to 1⅝ inches. Obviously the softer springs and longer travel, properly controlled, give an easier ride. The friction principle provides three-way control—lateral, longitudinal, and vertical. Load and friction springs combine to make the unit self-centering.

SAVES THESE THREE WAYS

Ride-Control saves much more than it costs. It helps protect lading and cut claims. It helps protect rolling stock and cut repair costs. It helps protect roadbed and cut track maintenance. The Ride-Control Package makes it possible to apply this three-way protection to your *present* rolling stock.

Why not start now to make these savings? Write for bulletins, or ask the A-S-F representative for details.

AMERICAN STEEL FOUNDRIES

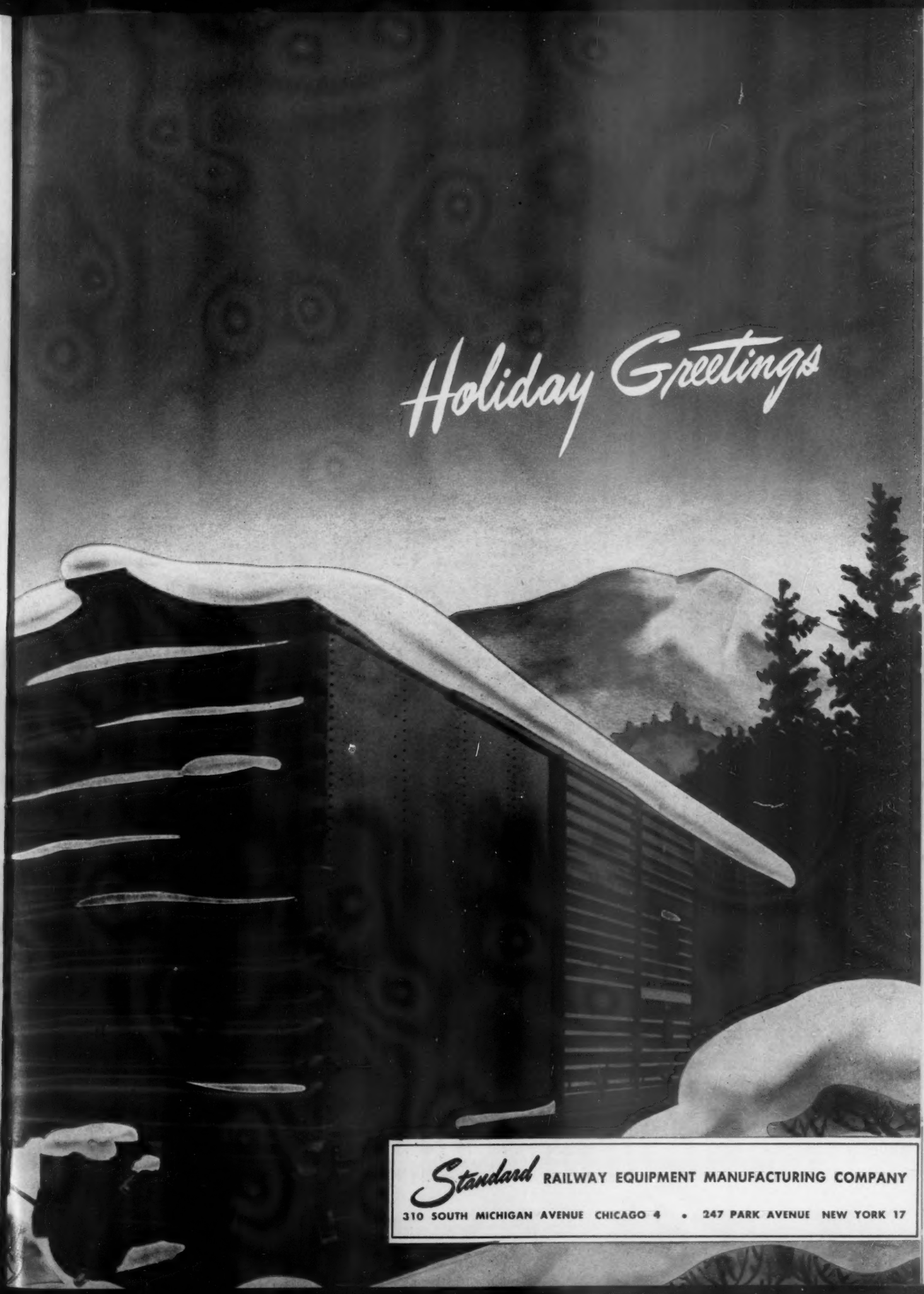
Mint Mark of ⬡ Fine Products

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1951

Name of road		Av. mileage operated during period	Operating revenues			Operating Expenses						Net from railway operation	Railway tax accruals	Net railway operating income	
			Freight	Passenger	Total (inc. misc.)	Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio			1951	1950
Colorado & Southern	Oct.	736	1,260,354	76,491	1,457,664	187,031	163,187	32,467	546,060	982,429	67.4	475,235	306,190	146,229	255,468
	10 mos.	738	11,307,693	898,411	13,183,861	1,708,875	1,948,647	272,516	5,012,877	9,492,730	72.0	3,691,131	2,476,680	887,132	1,184,397
Ft. Worth & Denver	Oct.	804	1,795,768	147,457	2,092,886	243,108	237,139	57,476	688,581	1,322,462	63.2	770,424	312,547	309,329	322,001
	10 mos.	804	14,036,311	1,617,878	17,024,256	2,359,413	2,366,652	536,629	6,522,502	12,732,845	74.8	4,291,411	1,519,481	1,565,361	2,245,169
Colorado & Wyoming	Oct.	41	148,188	.....	260,130	27,616	33,922	1,092	119,000	193,370	74.3	66,760	41,729	21,933	48,330
	10 mos.	41	1,523,566	.....	2,740,707	511,787	283,038	11,643	1,184,625	2,101,801	76.6	638,906	382,834	234,805	280,462
Columbus & Greenville	Oct.	168	193,232	1,078	204,335	37,252	22,788	3,342	58,073	140,228	68.6	64,107	38,487	28,391	17,821
	10 mos.	168	1,618,066	1,107	1,690,779	433,603	296,795	36,715	523,007	1,465,682	86.7	224,917	198,685	68,493	8,148
Delaware & Hudson	Oct.	793	5,288,352	170,229	5,606,830	711,578	1,213,406	80,908	1,890,999	4,086,512	72.9	1,520,318	962,099	625,981	931,791
	10 mos.	793	46,369,616	1,615,254	49,383,291	6,745,691	10,602,864	789,078	18,576,556	38,668,269	78.3	10,715,022	6,367,683	4,736,471	4,823,463
Delaware, Lackawanna & Western	Oct.	965	6,620,678	787,722	8,115,485	837,075	1,508,659	187,973	3,345,317	6,140,848	75.7	1,974,637	1,002,284	1,003,151	972,333
	10 mos.	965	59,738,196	8,004,230	73,846,134	8,274,351	14,196,038	1,704,582	33,464,262	60,223,572	81.6	13,622,562	7,834,053	5,804,132	6,677,374
Denver & Rio Grande Western	Oct.	2,334	7,306,715	284,491	7,828,171	617,983	1,099,637	170,592	2,414,478	4,587,381	58.6	3,240,790	1,823,416	1,410,416	1,565,069
	10 mos.	2,339	58,164,822	3,055,110	63,481,913	8,153,277	10,778,804	1,635,623	20,407,439	43,737,437	68.9	19,744,476	10,493,490	9,234,775	7,350,388
Detroit & Mackinac	Oct.	232	274,690	—46	277,740	75,000	23,880	5,047	42,236	156,629	56.3	121,111	93,577	15,890	64,895
	10 mos.	232	2,094,392	726	2,166,082	510,000	210,812	36,095	381,824	1,233,445	56.9	932,637	558,764	305,110	473,421
Detroit & Toledo Shore Line	Oct.	50	630,260	.....	633,672	71,005	59,406	14,816	206,006	363,721	57.4	269,951	96,613	86,685	96,740
	10 mos.	50	6,267,835	.....	6,302,303	721,395	588,140	139,365	2,067,590	3,641,216	57.8	2,661,087	1,047,087	702,569	959,287
Detroit, Toledo & Ironton	Oct.	464	1,528,902	332	1,605,105	213,623	285,153	29,034	418,311	993,393	61.9	611,712	347,496	239,719	381,595
	10 mos.	464	14,990,393	4,287	15,689,678	2,105,783	2,533,650	275,730	4,270,953	9,650,808	61.5	6,038,870	3,160,473	2,538,515	3,064,618
Duluth, Missabe & Iron Range	Oct.	567	5,961,768	1,345	6,918,339	598,981	745,462	8,598	2,155,072	3,641,197	52.6	3,277,142	3,221,117	15,686	1,795,919
	10 mos.	565	44,581,179	16,565	51,465,936	6,141,857	7,110,464	86,302	16,492,882	30,908,729	60.1	20,557,207	15,030,916	5,430,120	8,513,566
Duluth, South Shore & Atlantic	Oct.	539	657,566	6,021	697,559	115,928	138,146	22,317	243,676	537,916	77.1	159,643	29,023	109,576	157,985
	10 mos.	539	6,406,837	75,428	6,794,187	1,257,181	1,263,873	215,266	2,669,011	5,585,254	82.2	1,208,933	282,676	547,904	758,234
Duluth, Winnipeg & Pacific	Oct.	175	408,000	700	415,300	101,564	90,705	4,166	200,639	405,391	97.6	9,909	33,398	—74,650	7,257
	10 mos.	175	4,162,000	10,800	4,231,700	770,347	721,642	44,724	1,832,122	3,437,363	81.2	794,337	328,662	—15,049	130,206
Elgin, Joliet & Eastern	Oct.	238	4,099,909	.....	5,031,606	483,232	811,003	33,809	1,671,094	3,168,872	63.0	1,862,734	1,445,257	—4,283	855,842
	10 mos.	238	36,706,040	61	45,853,302	4,323,255	6,605,051	311,886	16,250,342	29,018,757	63.3	16,834,545	8,512,860	3,290,964	7,701,655
Erie	Oct.	2,243	14,667,446	610,786	16,512,832	2,057,376	2,459,601	343,589	6,272,467	11,849,735	71.7	4,663,097	2,095,161	1,998,953	2,405,551
	10 mos.	2,244	131,843,762	6,061,544	148,692,109	19,925,467	23,871,788	3,412,905	60,967,366	114,944,829	77.3	33,747,280	15,161,019	13,875,534	15,716,526
Florida East Coast	Oct.	571	1,513,458	299,662	1,988,249	383,409	409,388	71,732	790,251	1,795,507	90.3	192,742	163,946	—54,596	—190,688
	10 mos.	571	16,793,578	5,425,426	24,354,689	3,447,866	4,378,368	689,654	9,538,179	19,750,425	81.1	4,604,264	1,569,262	1,646,231	1,150,595
Georgia Railroad	Oct.	323	789,943	32,896	886,164	130,842	115,604	31,298	330,628	646,152	72.9	240,012	34,432	207,675	336,631
	10 mos.	323	6,890,231	578,895	8,065,545	1,188,347	1,219,917	310,343	3,194,397	6,272,816	77.8	1,792,729	379,411	1,505,409	1,487,099
Georgia & Florida	Oct.	359	245,267	15	249,757	79,556	32,942	16,566	80,970	224,595	89.9	25,162	16,573	—7,103	1,238
	10 mos.	359	2,822,204	194	2,880,471	803,281	331,286	188,524	884,218	2,343,422	81.4	537,049	167,857	157,226	—75,973
Grand Trunk Western	Oct.	952	4,344,000	187,000	4,859,000	827,990	400,651	67,612	2,205,476	3,673,990	75.6	1,185,010	183,883	—367,879	1,124,135
	10 mos.	961	42,057,000	1,985,000	47,638,000	7,515,184	8,288,434	707,207	20,956,115	39,123,493	82.1	8,514,507	2,780,581	2,349,045	6,742,327
Canadian Natl. Lines in New Eng.	Oct.	172	173,000	3,000	200,000	83,398	56,591	2,685	143,783	303,351	151.7	—103,351	22,746	—222,540	—91,041
	10 mos.	172	1,869,000	83,100	2,314,000	622,632	492,775	27,051	1,349,098	2,668,058	115.3	—354,058	227,460	—1,063,867	—1,045,562
Great Northern	Oct.	8,316	23,524,306	1,208,596	26,631,406	3,719,913	3,468,219	374,620	7,809,775	16,191,459	60.8	10,439,947	5,184,974	4,624,742	6,735,409
	10 mos.	8,316	182,328,592	11,476,129	209,191,462	36,635,557	34,310,281	3,722,447	72,227,187	154,716,598	74.0	54,474,864	31,635,938	19,838,263	18,557,122
Green Bay & Western	Oct.	224	360,545	.....	367,609	113,238	44,625	20,984	85,208	279,431	76.0	88,178	46,356	35,444	49,997
	10 mos.	224	3,350,581	.....	3,411,763	980,619	426,207	207,732	851,871	2,167,839	76.7	793,924	390,748	337,830	456,328
Gulf, Mobile & Ohio	Oct.	2,898	7,320,067	427,956	8,272,600	1,367,708	1,361,558	262,952	2,209,224	5,615,601	67.9	2,656,999	1,284,563	977,557	1,167,907
	10 mos.	2,898	63,155,885	4,333,474	72,351,447	11,911,591	14,087,287	2,539,673	21,773,153	53,790,832	74.4	18,560,615	8,523,835	6,687,292	6,423,685
Illinois Terminal	Oct.	462	1,066,887	82,662	1,283,654	217,064	151,360	40,785	451,534	912,719	71.1	370,935	200,939	121,633	199,896
	10 mos.	462	8,573,334	807,336	10,607,327	1,562,185	1,540,332	379,739	4,261,279	8,238,304	77.7	2,369,023	1,200,067	865,618	1,094,209
Illinois Central	Obt.	6,539	22,912,026	2,093,337	27,364,804	4,242,023	4,500,150	492,417	9,351,965	19,625,502	71.7	7,739,302	4,491,363	2,899,934	4,154,560
	10 mos.	6,539	200,711,001	19,224,364	241,552,650	39,778,113	42,639,387	4,992,112	89,635,383	181,292,809	77.5	54,259,841	26,907,389	22,903,281	24,410,868
Kansas City Southern	Oct.	891	3,237,352	132,643	3,670,103	369,990	441,699	83,362	1,075,388	2,087,320	56.9	1,582,583	706,000	561,762	707,503
	10 mos.	891	32,241,826	1,403,630	36,508,973	3,736,304	4,472,093	807,718	10,952,826	21,098,894	57.8	15,410,079	7,080,000	6,162,009	6,793,807
Kansas, Oklahoma & Gulf	Oct.	327	579,491	544	585,255	122,830	29,298	23,999	129,148	328,846	56.2	256,409	122,094	99,587	148,004
	10 mos.	327	5,446,059	6,055	5,500,145	743,378	341,212	205,313	1,255,479	2,762,654	50.2	2,737,491	1,280,770	1,112,025	912,030
Lake Superior & Ishpeming	Oct.	156	420,110	38	503,923	119,884	49,828	2,130	125,994	308,806	61.3	195,117	126,897	78,712	154,905
	10 mos.	156	3,338,456	343	4,022,670	580,947	492,858	19,908	1,073,117	2,296,115	57.1	1,726,555	1,126,931	725,313	667,979
Lehigh & Hudson River	Oct.	96	300,444	.....	301,288	47,950	29,679	11,410	88,989	188,071	62.4	113,217	14,577	78,651	52,572
	10 mos.	96	2,723,539	.....	2,748,924	421,661	258,038	109,562	822,374	1,711,081	62.3	1,037,843	445,656	429,550	265,625
Lehigh & New England	Oct.	184	927,154	.....	937,588	77,135	113,265	11,333	216,526	451,561	48.2	486,027	361,439	141,030	281,486
	10 mos.	189	7,429,193	.....	7,503,196	974,990	1,133,211	115,446	1,915,851	4,475,992	59.7	3,027,204	1,793,693	1,539,613	1,871,471
Lehigh Valley	Oct.	1,223	6,734,273	331,757	7,383,243	934,843	1,338,118	138,112	2,556,618	5,215,198	70.6	2,168,045	805,329	1,249,997	1,083,141
	10 mos.	1,225	59,286,501	3,215,254	65,257,528	8,702,065	13,565,723	1,378,841	25,672,252	51,744,958	79.3	13,512,570	5,995,099	6,617,036	6,736,873
Long Island	Oct.	365	1,453,274	3,124,940	4,834,213	494,206	777,062	10,461	2,254,706	3,700,277	76.5	1,133,936	477,960	639,193	—25,287
	10 mos.	365	12,716,531	29,753,348	45,043,330	5,968,502	8,358,343	137,098	23,568,278	39,631,967	88.0	5,411,363	4,526,937	—1,606,853	—552,803

Revenue and Expense table affords on next left-hand page



Standard RAILWAY EQUIPMENT MANUFACTURING COMPANY

310 SOUTH MICHIGAN AVENUE CHICAGO 4 • 247 PARK AVENUE NEW YORK 17

Revenue and Expense table appears on next left-hand page

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1951

		Av. mileage operated during period	Operating revenues			Operating Expenses					Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income	
						Maintenance of—									
			Freight	Passenger	Total (inc. misc.)	Way and structures	Equipment	Traffic	Transportation	Total				1951	1950
Louisiana & Arkansas	Oct.	756	1,914,600	51,400	2,033,882	223,528	314,613	68,255	575,165	1,257,736	61.8	776,146	297,731	363,243	317,919
	10 mos.	756	18,455,702	603,603	19,787,259	3,667,647	2,435,860	662,356	5,697,542	13,185,157	66.6	6,602,102	2,997,549	2,374,639	3,230,198
Louisville & Nashville	Oct.	4,765	18,909,208	976,154	21,514,098	2,762,324	4,182,437	349,912	6,955,717	14,924,689	69.4	6,589,409	4,293,953	3,193,385	4,153,044
	10 mos.	4,773	162,629,950	12,111,974	185,719,766	26,454,607	39,515,482	3,258,301	69,459,097	40,532,445	78.2	40,532,445	28,393,757	18,222,490	20,750,973
Maine Central	Oct.	981	2,036,604	104,089	2,299,218	485,171	402,257	19,554	752,097	1,732,258	75.3	566,960	347,463	214,071	148,845
	10 mos.	981	19,114,961	1,317,508	21,797,594	4,202,591	3,778,673	197,853	7,492,066	16,410,151	75.3	5,387,443	2,900,674	2,164,034	1,764,393
Midland Valley	Oct.	334	210,060	2	213,964	49,296	17,274	4,751	58,963	137,299	64.2	76,665	8,471	58,239	41,338
	10 mos.	334	1,710,522	65	1,740,414	483,413	172,960	42,672	591,937	1,361,657	78.2	378,757	180,098	94,819	170,550
Minneapolis & St. Louis	Oct.	1,406	2,254,727	5,516	2,358,236	289,605	264,755	121,336	655,570	1,442,017	61.1	916,219	441,160	313,698	376,828
	10 mos.	1,406	17,484,176	112,865	18,232,631	3,315,017	2,644,710	1,161,192	5,860,410	14,082,040	77.2	4,150,591	2,184,058	1,248,824	1,929,957
Minn. St. Paul & S. S. Marie	Oct.	3,224	4,477,580	62,081	4,751,038	770,503	618,107	87,475	1,527,816	3,127,926	65.8	1,623,112	860,362	666,522	1,078,045
	10 mos.	3,224	32,342,516	867,143	34,940,380	7,061,419	6,425,876	745,245	13,691,847	29,147,945	83.4	5,792,435	2,947,427	2,436,362	1,914,565
Mississippi Central	Oct.	148	241,614	—95	245,868	51,190	37,265	13,241	63,231	174,761	71.1	71,107	36,766	24,561	26,605
	10 mo5.	148	2,135,801	—37	2,178,012	433,438	286,701	129,900	577,277	1,520,656	69.8	657,356	322,546	228,539	205,660
Missouri-Illinois	Oct.	172	539,562	182	543,983	68,474	65,025	7,701	146,624	297,827	54.7	246,156	164,386	84,594	124,104
	10 mos.	172	4,405,015	1,975	4,469,256	669,036	650,007	80,113	1,190,713	2,674,859	59.9	1,794,397	1,152,894	711,075	704,712
Missouri-Kansas-Texas Lines	Oct.	3,242	6,354,319	433,466	7,345,111	963,569	988,790	250,221	2,533,166	5,065,061	69.0	2,280,050	1,106,497	853,879	1,054,925
	10 mos.	3,242	54,649,538	4,235,849	64,196,121	9,758,569	9,414,157	2,441,945	24,750,708	49,550,405	77.2	14,645,716	6,611,419	5,197,267	7,048,712
Missouri Pacific	Oct.	6,950	19,631,826	952,532	22,669,684	3,933,696	4,069,279	459,847	8,075,508	17,196,160	75.9	5,473,524	1,629,644	3,353,475	3,181,253
	10 mos.	6,957	168,393,229	10,266,177	196,116,120	34,925,337	38,224,656	4,427,883	75,222,642	159,135,435	81.1	36,980,685	13,227,353	18,898,830	22,451,457
International-Great Northern	Oct.	1,104	2,920,951	168,108	3,395,783	640,087	545,765	56,096	1,266,815	2,645,259	77.9	750,524	206,355	412,756	281,887
	10 mos.	1,104	26,928,757	2,212,756	31,787,370	6,479,317	5,409,842	549,383	12,543,735	26,324,475	82.8	5,462,895	1,396,869	2,563,938	2,459,696
Gulf Coast Lines	Oct.	1,727	3,518,336	81,831	3,852,131	708,352	516,488	91,062	1,262,469	2,727,822	70.8	1,124,309	418,660	489,057	487,002
	10 mos.	1,727	33,327,777	1,072,523	36,393,429	7,305,161	5,491,390	849,416	12,167,207	27,274,502	74.9	9,118,927	3,231,294	3,742,914	4,404,415
Monongahela	Oct.	178	829,537	.....	834,405	102,333	91,432	1,180	316,293	519,015	62.2	315,390	67,489	91,593	19,029
	10 mos.	178	7,446,707	32	7,485,423	913,086	883,220	11,957	2,612,101	4,495,780	60.1	2,989,643	666,785	850,791	292,818
Montour	Oct.	51	277,022	.....	277,394	23,137	101,029	924	101,242	236,401	85.2	40,993	60,507	42,319	79,261
	10 mos.	51	2,217,576	.....	2,223,065	294,122	889,309	9,019	896,983	2,174,751	97.8	48,314	393,748	286,944	496,095
Nashville, Chatt. & St. Louis	Oct.	1,032	3,144,987	131,893	3,675,032	640,941	503,199	115,589	1,163,321	2,539,199	69.1	1,135,833	671,834	424,646	718,751
	10 mos.	1,047	27,204,053	1,717,942	31,589,320	5,726,605	4,713,968	1,120,529	11,239,980	23,977,604	75.9	7,611,716	4,810,661	2,958,887	3,857,617
New York Central	Oct.	10,725	54,227,737	10,049,689	75,727,432	11,306,196	14,508,790	1,064,009	30,516,046	60,594,210	80.0	15,133,228	5,671,902	7,801,653	5,582,408
	10 mos.	10,727	491,398,807	99,444,223	667,043,102	91,299,891	137,061,823	10,476,512	307,092,762	577,017,328	86.5	90,025,774	50,280,447	24,556,763	30,538,582
Pittsburgh & Lake Erie	Oct.	221	4,065,937	75,266	4,339,070	563,213	1,611,667	73,110	1,453,911	3,920,911	90.4	418,159	699,486	480,211	579,402
	10 mos.	221	38,557,173	801,842	41,265,634	5,121,898	13,239,407	725,302	14,476,039	35,657,908	86.4	5,607,726	6,918,328	5,957,938	6,426,883
New York, Chicago & St. Louis	Oct.	2,188	14,462,048	177,346	15,097,867	1,493,786	2,335,337	305,277	4,825,632	9,421,698	62.4	5,676,169	2,821,572	2,521,554	2,819,314
	10 mos.	2,192	127,380,579	1,728,038	133,600,389	15,171,094	22,368,944	3,047,715	46,814,411	91,828,411	68.7	41,771,978	19,607,162	18,478,655	20,612,790
New York, New Haven & Hartford	Oct.	1,793	8,048,108	4,159,970	13,615,505	2,061,939	2,203,055	184,924	5,636,147	10,956,077	80.5	2,659,428	912,000	786,985	1,240,772
	10 mos.	1,794	76,914,583	40,116,885	129,777,395	20,007,710	21,320,728	1,876,658	56,198,783	106,027,233	81.7	23,750,162	9,469,333	5,285,232	8,663,499
New York Connecting	Oct.	21	252,225	.....	271,483	260,233	35,242	.....	194,154	492,450	181.4	—220,967	82,105	—496,008	61,065
	10 mos.	21	2,577,749	.....	2,701,052	1,141,547	184,193	.....	787,874	2,141,672	79.3	559,380	746,357	—97,444	524,100
New York, Ontario & Western	Oct.	542	665,026	—107	688,112	120,422	81,345	25,463	273,630	531,651	77.3	156,461	36,994	60,096	54,891
	10 mos.	542	5,831,311	71,892	6,137,280	1,175,675	867,316	262,430	2,855,752	5,467,550	89.1	669,730	374,367	—368,951	—460,719
New York, Susquehanna & Western	Oct.	120	413,199	42,969	480,507	54,389	67,754	9,021	196,960	353,884	73.6	126,623	37,609	52,474	52,691
	10 mos.	120	3,959,198	378,601	4,532,537	552,282	547,808	81,279	1,930,114	3,357,219	74.1	1,175,318	332,463	470,576	446,134
Norfolk & Western	Oct.	2,135	18,513,652	419,843	19,816,084	2,400,013	3,441,825	287,219	5,490,664	12,212,827	61.6	7,603,257	5,468,712	3,070,854	3,483,297
	10 mos.	2,135	158,069,051	4,868,416	170,326,785	22,509,288	33,436,509	2,837,945	50,333,364	115,070,733	67.6	55,256,052	39,722,729	24,853,644	23,300,533
Norfolk Southern	Oct.	643	1,015,828	.....	1,049,875	215,621	132,607	45,321	336,902	801,086	76.3	248,789	112,837	68,022	92,330
	10 mos.	643	9,246,890	1,371	9,493,031	1,788,822	1,173,654	459,694	3,098,985	7,225,364	76.1	2,267,667	1,120,431	668,696	577,226
Northern Pacific	Oct.	6,886	16,019,689	512,811	17,639,934	2,498,571	3,044,641	297,774	5,900,750	12,415,765	70.4	5,224,169	3,308,070	2,472,207	4,960,603
	10 mos.	6,887	126,733,486	6,312,719	142,704,916	22,969,481	27,832,191	2,796,814	54,222,041	114,443,429	80.2	28,261,487	19,354,331	12,302,924	16,188,425
Northwestern Pacific	Oct.	331	1,085,178	4,452	1,122,918	247,826	98,780	5,233	448,165	814,910	72.6	308,008	118,846	113,135	62,491
	10 mos.	331	9,444,196	43,217	9,752,017	2,305,804	981,872	48,863	4,186,892	7,686,926	78.8	2,065,091	828,653	344,576	569,568
Oklahoma City-Ada-Atoka	Oct.	132	111,848	.....	113,354	23,861	6,913	1,815	20,129	56,995	50.3	56,359	22,852	22,203	4,792
	10 mos.	132	972,394	—66	981,310	225,280	47,801	16,844	214,539	542,768	55.3	438,542	177,675	144,468	34,750
Pennsylvania	Oct.	10,127	72,910,280	12,934,499	94,623,770	11,334,282	21,645,205	1,280,971	39,664,122	76,956,466	81.3	17,667,304	8,148,945	7,590,560	5,111,665
	10 mos.	10,127	658,300,851	127,226,171	863,739,978	108,162,489	212,012,011	12,911,293	375,785,265	740,068,906	85.7	123,671,072	57,971,543	48,252,326	48,315,394

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1600 h. p. road switcher

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GENERAL STEEL CASTINGS

GRANITE CITY, ILL. EDDYSTONE, PA.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1951

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating Expenses: Maintenance of—Way and structures	Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income: 1951	1950
Pennsylvania-Reading Seashore Lines	Oct.	365	722,863	146,310	904,351	211,149	91,937	9,245	552,783	896,265	99.1	8,086	101,521	—211,666	—261,717
	10 mos.	365	6,361,245	2,210,553	8,974,159	2,165,840	957,381	109,867	5,996,338	9,601,453	107.0	—627,294	1,009,990	—3,010,321	—3,602,691
Pittsburg & Shawmut	Oct.	97	207,363	.....	208,228	41,382	64,446	4,707	61,704	180,712	86.8	27,516	13,854	28,158	22,697
	10 mos.	97	1,991,106	.....	2,001,776	346,292	578,937	35,503	561,226	1,598,694	79.9	403,082	107,347	349,556	346,101
Pittsburgh & West Virginia	Oct.	132	808,750	.....	820,104	137,112	210,853	50,031	198,189	623,752	76.1	196,352	116,328	121,777	142,958
	10 mos.	132	7,225,501	.....	7,327,454	1,426,497	1,803,618	484,051	2,002,164	5,977,710	81.6	1,349,744	853,698	1,031,997	1,168,740
Reading	Oct.	1,313	10,649,836	585,425	11,869,395	2,034,948	2,574,409	154,484	4,412,104	9,537,122	80.4	2,332,273	1,390,701	1,100,882	1,458,150
	10 mos.	1,313	95,203,165	5,748,815	107,162,078	16,752,654	23,779,297	1,409,304	42,634,343	87,966,722	82.1	19,195,356	11,369,862	9,096,622	10,741,730
Richmond, Fredericksburg & Potomac	Oct.	118	1,324,797	439,071	1,985,299	347,605	283,269	22,556	656,482	1,438,491	72.5	546,808	339,828	123,504	249,764
	10 mos.	118	14,480,928	5,665,077	22,464,333	2,965,930	2,805,737	207,309	7,274,148	14,598,612	65.0	7,865,721	4,371,841	2,479,170	2,665,583
Rutland	Oct.	397	434,976	23,316	535,903	91,257	106,087	15,903	244,266	485,596	90.6	50,307	33,292	—3,956	—1,392
	10 mos.	402	3,945,715	273,315	4,949,536	827,151	832,596	154,984	2,518,338	4,560,031	92.1	389,505	327,131	—122,137	—118,277
Sacramento Northern	Oct.	271	376,485	.....	391,680	52,018	21,331	2,317	95,451	180,272	46.0	211,408	16,060	161,682	70,774
	10 mos.	271	2,828,144	205	2,904,149	535,539	266,970	21,767	942,900	1,850,064	63.7	1,054,085	145,112	677,407	452,561
St. Louis-San Francisco	Oct.	4,601	10,011,184	571,528	11,401,296	1,820,928	1,799,848	306,231	3,871,814	8,327,665	73.0	3,073,631	1,780,088	1,349,915	1,914,401
	10 mos.	4,611	88,804,784	6,249,090	102,354,806	17,159,799	17,395,113	2,824,234	38,641,288	80,733,347	78.9	21,621,459	12,355,799	9,621,559	11,440,652
St. Louis, San Francisco & Texas	Oct.	159	386,815	12,666	433,542	60,421	35,143	19,975	148,991	276,277	63.7	157,265	80,334	31,571	36,213
	10 mos.	159	3,644,534	113,068	4,024,165	508,662	365,784	185,464	1,539,967	2,726,914	67.8	1,297,251	510,308	291,398	250,773
St. Louis Southwestern Lines	Oct.	1,569	6,338,050	34,679	6,610,213	876,878	627,223	158,819	1,799,332	3,658,856	55.4	2,951,357	1,988,991	734,450	1,414,406
	10 mos.	1,569	55,260,599	549,806	57,907,974	7,383,235	6,868,130	1,530,350	18,171,146	35,842,039	61.9	22,065,935	12,038,275	7,391,126	9,938,227
Seaboard Air Line	Oct.	4,146	10,014,501	900,844	11,803,640	1,877,100	2,236,913	358,051	4,048,020	9,018,367	76.4	2,785,273	1,474,155	1,286,599	1,324,069
	10 mos.	4,146	103,128,383	12,192,229	123,789,101	20,118,521	21,571,173	3,476,625	42,091,874	92,422,717	74.7	31,366,384	15,636,182	13,994,976	13,044,113
Southern	Oct.	6,305	19,390,738	1,417,099	24,451,173	3,208,691	4,773,868	414,760	7,706,260	16,992,327	69.5	7,458,846	3,966,154	2,895,942	3,132,364
	10 mos.	6,338	182,156,681	16,905,901	215,305,877	29,488,230	42,462,347	3,987,615	75,806,020	160,401,157	74.5	54,904,720	28,067,876	21,424,594	23,362,488
Alabama Great Southern	Oct.	327	1,545,581	78,550	1,977,706	275,539	431,302	33,055	527,681	1,330,987	67.3	646,719	382,482	253,949	302,233
	10 mos.	320	14,041,884	950,430	16,451,349	3,212,686	4,027,340	323,838	5,586,953	13,767,670	83.7	2,683,679	2,044,994	874,723	1,637,292
Cinn., New Orleans & Texas Pacific	Oct.	336	3,293,611	153,384	3,908,490	454,128	787,682	66,890	978,837	2,402,609	61.5	1,505,881	1,118,787	523,616	971,886
	10 mos.	336	32,587,405	2,084,738	36,692,759	4,426,248	8,438,662	672,813	9,841,443	24,630,341	67.1	12,062,418	8,157,754	4,824,254	6,622,445
Georgia Southern & Florida	Oct.	397	550,262	47,800	739,002	146,511	68,152	6,995	214,467	451,123	61.0	287,879	113,441	71,908	61,273
	10 mos.	397	5,500,020	789,164	6,937,164	1,550,312	676,259	76,205	2,191,622	4,689,721	67.6	2,247,443	676,735	512,823	480,400
New Orleans & Northeastern	Oct.	203	1,099,458	49,055	1,274,459	147,984	138,675	20,006	267,142	619,890	48.6	654,569	435,780	188,835	288,984
	10 mos.	203	9,828,763	550,264	10,997,753	1,477,850	1,297,661	195,633	2,514,530	5,936,703	54.0	5,061,050	3,151,960	1,584,181	1,945,202
Southern Pacific	Oct.	8,136	41,463,324	3,412,914	47,450,365	4,980,338	9,534,672	815,197	17,525,054	34,862,604	73.5	12,587,761	6,391,365	5,178,579	5,719,568
	10 mos.	8,129	366,234,386	35,718,425	426,065,634	48,126,953	90,298,766	7,668,490	164,943,416	330,569,569	77.6	95,496,065	52,167,910	33,461,241	38,929,588
Texas & New Orleans	Oct.	4,292	11,328,895	725,086	12,833,934	1,717,373	1,895,513	263,443	4,520,593	8,853,817	69.0	3,980,117	1,788,885	1,259,849	1,433,222
	10 mos.	4,299	98,959,287	8,163,588	114,348,329	17,981,453	17,439,293	2,475,533	44,264,694	87,463,756	76.5	26,884,573	11,379,562	7,302,703	10,323,864
Spokane International	Oct.	152	202,134	901	217,282	69,924	29,022	4,810	57,234	170,003	78.2	47,279	13,460	18,260	51,764
	10 mos.	152	2,061,786	9,374	2,189,034	563,519	240,826	48,127	581,400	1,527,354	69.8	661,680	245,633	266,071	374,545
Spokane, Portland & Seattle	Oct.	931	2,321,683	89,746	2,554,336	477,175	314,938	26,221	818,065	1,735,633	67.9	818,703	144,903	558,456	1,227,684
	10 mos.	931	23,513,529	886,836	25,657,284	4,065,274	3,086,641	244,920	7,660,609	15,931,990	62.1	9,725,294	3,480,599	5,045,084	4,842,575
Tennessee Central	Oct.	286	477,192	3,249	510,382	94,986	68,075	10,551	156,233	349,966	68.6	160,416	24,212	96,114	87,413
	10 mos.	286	3,910,834	160,712	4,304,326	905,141	683,323	111,261	1,456,754	3,351,561	77.9	952,765	249,093	367,440	470,938
Texas & Northern	Oct.	8	109,516	.....	122,071	6,557	17,162	855	28,896	59,597	48.8	62,474	35,945	17,362	36,832
	10 mos.	8	1,066,905	.....	1,189,628	132,951	121,011	9,431	298,278	607,001	51.0	582,627	295,294	161,723	328,495
Texas & Pacific	Oct.	1,846	5,895,530	370,074	7,001,280	947,913	1,079,485	187,719	2,168,954	4,708,924	67.3	2,292,356	1,101,893	1,027,234	2,077,109
	10 mos.	1,846	54,942,498	4,222,758	64,032,530	8,763,344	9,902,589	1,732,740	21,270,174	44,860,237	70.1	19,172,293	8,124,834	7,833,406	7,782,836
Texas Mexican	Oct.	162	267,214	.....	295,462	86,730	32,645	7,077	58,772	204,588	69.2	90,874	41,102	23,177	67,692
	10 mos.	162	2,476,959	.....	2,788,896	699,573	343,201	73,513	637,022	1,938,291	69.5	850,605	350,681	279,895	486,753
Toledo, Peoria & Western	Oct.	239	601,707	—5	610,752	78,452	27,851	41,124	127,651	301,645	49.3	309,107	150,570	121,226	124,848
	10 mos.	239	5,598,754	196	5,672,954	977,143	384,842	427,060	1,346,704	3,464,445	61.0	2,208,509	1,006,396	744,755	833,805
Union Pacific	Oct.	9,756	42,453,907	3,344,565	49,146,512	5,246,492	8,559,802	870,804	16,555,348	33,357,167	67.9	15,789,345	8,761,598	5,217,304	6,651,978
	10 mos.	9,728	354,698,459	32,435,030	415,937,953	56,233,873	80,980,074	8,790,296	149,010,952	316,287,957	76.9	99,649,596	62,102,024	23,188,171	33,053,917
Utah	Oct.	110	171,913	.....	172,090	9,773	47,534	869	69,780	135,291	78.6	36,799	10,767	42,651	6,978
	10 mos.	110	1,035,051	.....	1,037,495	163,759	464,032	7,827	484,564	1,192,075	114.9	—164,580	104,623	—129,833	—96,257
Virginian	Oct.	643	4,429,852	2,281	4,592,494	548,522	1,033,276	45,596	948,996	2,668,351	58.1	1,924,143	1,315,000	787,244	1,036,682
	10 mos.	643	37,300,230	27,500	38,697,157	4,592,105	8,505,486	425,230	8,351,225	22,801,850	58.9	15,895,307	10,322,500	7,440,051	7,220,525
Wabash	Oct.	2,393	9,890,551	429,006	10,966,089	1,381,070	1,162,801	284,003	4,034,143	7,227,931	65.9	3,738,158	1,792,891	1,473,234	1,988,061
	10 mos.	2,393	81,025,437	4,294,100	91,862,882	13,468,941	11,913,911	2,750,673	38,119,416	69,785,448	76.0	22,077,434	9,839,937	7,289,868	8,862,594
Ann Arbor	Oct.	294	734,470	4,469	755,989	101,000	100,836	26,345	333,225	580,699	76.8	175,290	108,119	55,174	128,528
	10 mos.	294	7,588,794	6,969	7,784,352	1,005,592	1,057,576	254,662	3,220,169	5,731,763	73.6	2,052,589	1,089,210	770,936	1,174,762
Western Maryland	Oct.	837	3,982,956	8,628	4,186,855	492,739	842,771	84,605	1,256,150	2,839,843	67.8	1,347,012	873,000	769,375	809,848
	10 mos.	837	37,673,234	95,325	39,540,528	5,335,780	7,974,268	796,575	12,451,195	28,114,893	71.1	11,425,635	7,096,000	6,663,873	6,628,616
Western Pacific	Oct.	1,193	5,160,145	257,966	5,537,860	732,033	637,767	205,446	1,379,580	3,189,255	57.6	2,348,605	1,244,017	937,826	1,228,616
	10 mos.	1,193	42,167,448	2,548,660	45,723,699	6,245,403	6,574,873	1,779,498	12,975,131	30,029,160	65.7	15,694,539	8,725,146	6,084,429	7,165,598
Wisconsin Central	Oct.	1,046	2,561,729	43,444	2,766,631	437,317	420,249	75,155	1,091,388	2,127,310	76.9	639,321	154,357	259,244	678,514
	10 mos.	1,049	24,048,517	440,328	25,806,997	3,746,054	4,471,676	660,744	10,829,153	20,718,518	80.3	5,088,479	1,377,234	1,896,791	3,104,321

KOPPERS CREOSOTED TIMBER PANEL GRADE CROSSINGS

● Koppers Creosoted Grade Crossings are made to last. They are sturdily built and decay-resistant, do not sag, spall, "washboard," or disintegrate under heavy wheel load. When the track is worked, they can be removed and replaced, using all the original material.

The panel method of construction offers easy installation. Completely assembled individual panels can be handled and placed by workmen. The assembly is securely fastened to withstand vibration, swelling or shrinking of the wood.

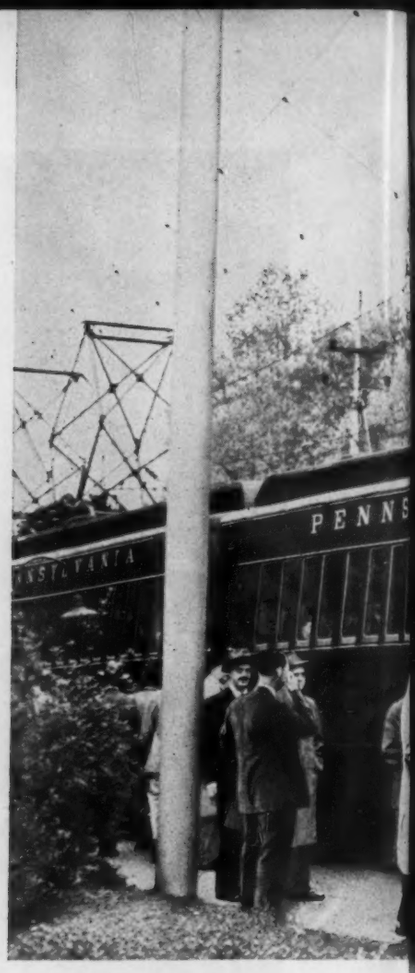
Write for a copy of the new folder on KOPPERS GRADE CROSSINGS. It contains construction details, technical data, and the reasons why Koppers Grade Crossings will save you money.

KOPPERS **PRESSURE-TREATED WOOD**

KOPPERS COMPANY, INC. • Pittsburgh 19, Pa.

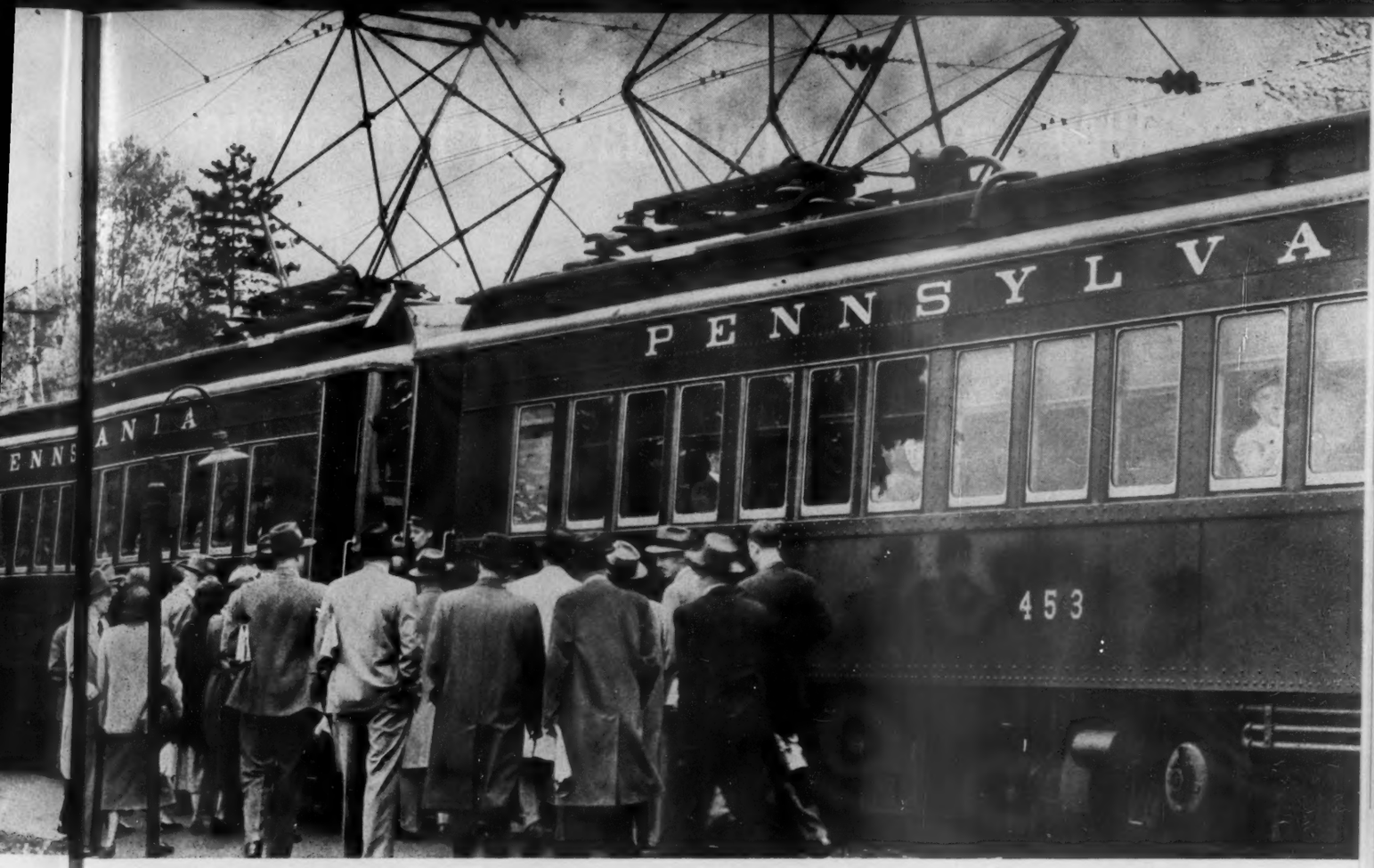
PENNSYLVANIA CONTINUES PROGRESS

with



NEWLY DESIGNED 4-MOTOR

Pleasant interior color scheme combines red or blue upholstery with sides of pastel gray with red trim and ceilings in eggshell white. Asphalt tile is used for floor covering. Roofs, sides, and floors are insulated for greater comfort in both summer and winter.



By adding the 50 newly designed cars, the Pennsylvania has increased its over-all daily commuting capacity by 14,400 seats.

COMMUTER CARS

50 completely rebuilt cars used for service in the electrified Eastern commuter zone include modern G-E equipment that incorporates latest advances in design of a-c motor and control apparatus. Result is more comfortable transportation for growing commuter traffic.

RAILROAD ELECTRIFICATION SYSTEMS

With large numbers of city dwellers moving to the more spacious suburbs in recent years, railroads have had an increasing problem to handle traffic that is crowding the commuter passenger-mile record of 1926. Among the roads that are providing for this increase—and for even more business in the future—is the Pennsylvania, which has recently completed the rebuilding of 50 commuter cars.

Staunch believer in railroad electrification where it is justified by the volume of traffic, the Pennsylvania management is convinced that MU cars are most efficient for heavy commuter service. Further experience and various studies show that all-motor-car trains are preferable to motor-trailer combinations, and the ideal is for *each axle to be powered.*

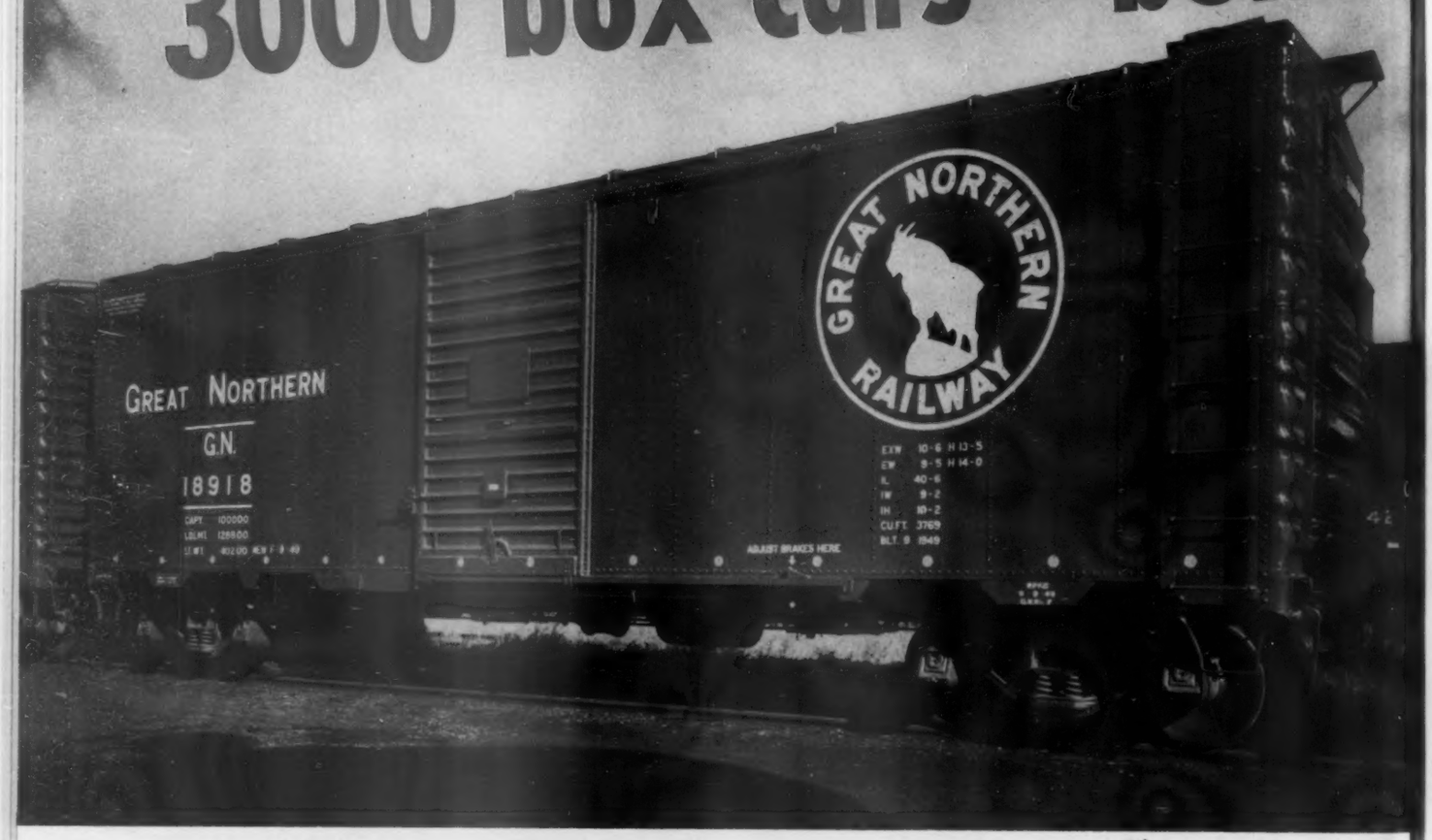
The Pennsylvania's newly designed 4-motor cars operate on 11,000-volt, 25-cycle, single-phase a-c. They have a top speed of 70 mph and meet the tough requirements of modern commuter service—fast schedules and frequent stops. By selecting G-E motors and control, the Pennsylvania is capitalizing on the latest advances in design of a-c apparatus. Ask your G-E representative for the full story of the benefits of electrification for commuter service through the use of modern G-E distribution and traction equipment, or write to *General Electric Company, Schenectady 5, N. Y.*

GENERAL ELECTRIC

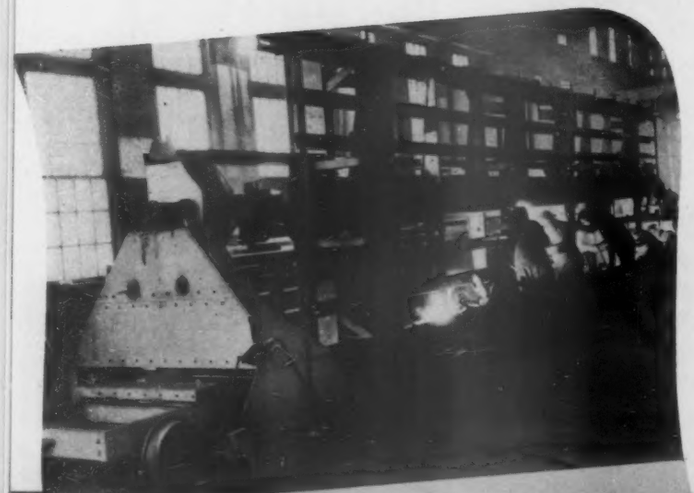
123-1

Since 1947 Great Northern has put into service

3000 box cars "built



1,500 of these modern 50-ton box cars were built by Great Northern in 1949. 1,000 cars of similar design are now under construction. U·S·S COR-TEN is used in all underframe parts and in car ends.



An all-COR-TEN box car underframe being welded at Great Northern's Superior, Wis. shops. A specially-designed positioning rig and COR-TEN's superior weldability combine to reduce time and labor and to assure high quality results.

Here, the continuous welding of center sills is simplified and speeded up by ingenious clamping and positioning devices and modern welding equipment.

with U·S·S COR-TEN"

...is now building 1000 more

IN THE PAST sixteen years American railroads have placed in operation more than 140,000 freight cars built with substantial amounts of U·S·S COR-TEN.

What is especially significant about these figures is the fact that most of these cars have been built on repeat orders. After seeing what this equipment can do, many owners have added more cars built with this famous U·S·S High Strength Steel. Not once, but again and again.

The case of the Great Northern is typical.

Great Northern first used U·S·S COR-TEN construction for 250 flat cars and 500 gondolas in 1944. In 1947, 500 box cars built with U·S·S COR-TEN were produced in their own shops. The next year, 1000 more were built. 1500 box cars and 700 gondolas were added in 1949. The latest order of 1000 box cars now under construction brings the number of Great Northern freight cars built with U·S·S COR-TEN to a total of 5,450.

Like Great Northern, the Union Pacific with 15,649 COR-TEN-built cars in service, the Milwaukee Road with 19,206, the Denver & Rio Grande Western with 5,650, Chicago, Burlington & Quincy with 11,885, and other leading railroads have added more and more freight equipment built with U·S·S High Strength Steels to their lines. Why? Simply because this equipment has paid off. It has carried more payload. It has cost less to operate. It has cost less for maintenance. It has proved its ability to outlast other construction, to stand up in service.

Take advantage of the proved economies, the greater efficiency, and the longer service life that construction with U·S·S COR-TEN offers. Our engineers will be glad to show you how readily this famous "steel that does more" can be applied to any type of freight equipment, to improve its performance, prolong its life and materially reduce maintenance costs.

A load of Great Northern underframes fabricated of U·S·S COR-TEN ready for shipment to the assembly shops at St. Cloud, Minn.

AMERICAN STEEL & WIRE COMPANY, CLEVELAND
COLUMBIA STEEL COMPANY, SAN FRANCISCO
NATIONAL TUBE COMPANY, PITTSBURGH
TENNESSEE COAL, IRON & RAILROAD COMPANY, FAIRFIELD, ALA.
UNITED STATES STEEL COMPANY, PITTSBURGH
UNITED STATES STEEL SUPPLY COMPANY, WAREHOUSE DISTRIBUTORS, COAST-TO-COAST
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

1-1935

USS

U·S·S HIGH STRENGTH STEELS

UNITED STATES STEEL

FREEDOM WHEELS

Users' experience certifies Freedom Wheels as the most successful means of suppressing or eliminating thermal cracking under the unusually severe braking conditions in today's high speed operations.

Over 500,000 in service. Ask a user about Freedom Wheels' high-speed, severe-braking performance.

STANDARD STEEL WORKS DIVISION

BALDWIN-LIMA-HAMILTON CORPORATION
Burham, Penna.

BALDWIN-LIMA-HAMILTON

12 mile rail laid in 25 hrs.

When you're tearing up rail on a hot traffic spot such as Moffat Tunnel, you want to be mighty sure that new steel goes down again *fast*. That's why Denver, Rio Grande and Western picked a 25-ton American Locomotive Crane to handle the job.

The new rail was 133-pound stock, replacing badly worn 130-pound. It was first welded into 1600-foot sections outside the tunnel, then carried in on flat cars and welded into a continuous strip. A special cradle, designed by DRG&W, hung at the end of the crane's boom and positioned the rail for fastening. The 12.6 mile job was finished in 25 hours, without a hitch.

For such ticklish projects, and for scrap handling, bridge work, maintenance, choose your crane from the broad American line. Diesel and DiesELectric models, capacities from 25 to 80 tons. Mail the coupon for catalogs.

Modernize...economize...with

American Hoist
& Derrick Company
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AMERICAN LOCOMOTIVE CRANES

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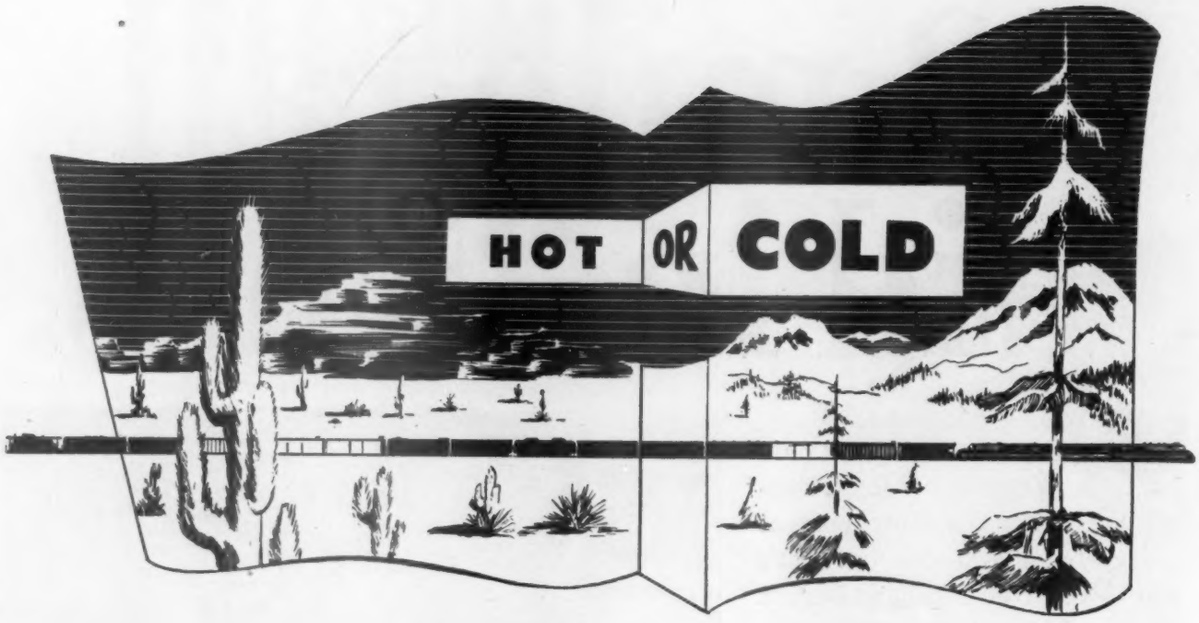


Streamlite HAIRINSUL *IS ALWAYS EFFICIENT!*

The valuable perishables which modern refrigerator cars carry are fully protected against sudden and extreme temperature changes by efficient Streamlite Hairinsul.

Leading refrigerator car builders have been specifying all-hair insulation for nearly half a century—and they find today that Streamlite Hairinsul, with its 40% less weight, is the most efficient and economical.

Streamlite Hairinsul assures you all the advantages given at the right—and more besides. Write for complete data.

1 LOW CONDUCTIVITY. Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity—.25 btu per square foot, per hour, per degree F., per inch thick.

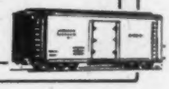
2 LIGHT WEIGHT. Advanced processing methods reduce weight of STREAMLITE HAIRINSUL by 40%.

3 PERMANENT. Does not disintegrate when wet, resists absorption. Will not shake down, is fire-resistant and odorless.

4 EASY TO INSTALL. Blankets may be applied to car wall in one piece, from sill to plate and from one side door to the other. Self-supporting in wall sections between fasteners.

5 COMPLETE RANGE. STREAMLITE HAIRINSUL is available ½" to 4" thick, up to 127" wide. Stitched on 5" or 10" centers between two layers of reinforced asphalt laminated paper. Other weights and facings are available.

6 HIGH SALVAGE VALUE. The all-hair content does not deteriorate with age; therefor has high salvage value. No other type of insulation offers a comparable saving.



Dept. H-112, Merchandise Mart, Chicago 54, Ill.

COMMON CARRIER ROLE DOESN'T GET TALKED ABOUT ENOUGH

The railroads do not emphasize often or vigorously enough the importance to the public of their common carrier status—or object sufficiently to the disadvantages they suffer in continuing to maintain that status. The consequence is that shippers, and other people whose opinions are important in the formulation of public policy toward transportation, usually fail to give merited weight to the public concern in retaining common carrier operation, and to mitigating railroad burdens to the extent necessary to assure continuance of such service.

For example, in his statesmanlike address to the N.I.T. League on November 15, President B. B. Jennings of Socony Vacuum expressed himself in favor of a legislative framework which would encourage the division of traffic among the various transportation agencies on a basis of their comparative economic costs. This is a point of fundamental importance, and deserves recognition and acclaim as affording common ground for men of good will in both the railroad and the petroleum industries to stand upon.

But Mr. Jennings said nothing specifically to indicate his appreciation of the importance to the nation of the railroads' common carrier function. On the contrary, he seemed to believe that there was little to be said, from the standpoint of the public interest, in criticism of the petroleum industry's large measure of reliance on private and contract carriers, in preference to common carrier service. Perhaps he had the common carrier function in mind but did not have time to dwell upon it. Be that as it may, there is not going to be any solution to the nation's transportation crisis which contents itself merely with requiring the several agencies of transportation to practice self-support and pay taxes under an identical formula for all. This reform would be very helpful to the railroads, but it would by no means remove the inequities under which they labor. In a recent talk to the Cleveland Rotary Club, President Lynne White of the Nickel Plate made plain the public importance of the common carrier function. Referring to the twice-defeated proposal before the Ohio legislature for granting rights of eminent domain to a belt-conveyor transportation system, he said:

"This proposed transportation system was to be selective in its freight. It wanted only certain commodities —the iron ore and the coal which make up a large part of the railroads' volume of traffic and an appreciable part of rail revenues. The belt proponents would have very generously left the rest of the freight for the railroads. But what would be left would not be adequate to keep the railroads in business and allow them to make the improvements and modernization needed to properly serve the public. . . . If a new form of transportation, handling only a few, selected kinds of freight, can weaken and perhaps destroy our basic transportation system, what kind of progress is that? The railroads, remember, to qualify for the right of eminent domain, must handle all kinds of freight indiscriminately. A belt conveyor, selecting only certain types of revenue freight, would discriminate against shippers whose products could not be handled by a so-called 'Rubber Railroad.'"

A Grave Risk to Take

In disputes involving rival kinds of transportation, the regulatory authorities practically never give weight to the public advantage to be served by retaining the railroads' unique readiness to serve all comers. No truck, bus, air or barge line—whether nominally a common carrier or not—has ever yet been known to continue serving for very long a route, commodity or customer whose patronage was unattractive. There is no practicable way of requiring a common carrier by highway, water or air to accept all traffic—because none of them can, or could, have facilities sufficient to move any large percentage of total traffic. Thus because of circum-

stances which are lucky for them their operations are, by nature, of the "pick and choose" variety; and any producer who is forced to rely upon them may wake up any day to find himself forced to enter the transportation business to move his own raw materials or products, or to go quietly out of business.

It certainly cannot be accepted as a principle of sound national policy toward transportation that the nation's producers be placed in jeopardy of having to finance their own transportation service. But such jeopardy exists wherever—as happens every day—the nation's genuine common carriers have regulatory handicaps placed in the way of their equal competition with private and contract carriers, and with those agencies which are called common carriers without actually accepting all the obligations of that status, as the railroads do.

An Instructive Parallel

The electric utility companies faced this identical difficulty from the competition of private generating plants—but they have succeeded, if not in overcoming it completely, at least in keeping the disease "under control." They did this by charging what are contract rates, at least in substance, whenever competition required such action. That is to say, an electric utility is not just a "common carrier" of electrical current, permitted to charge only the equivalent of "carload" and "l.c.l." rates—it is also permitted by the regulators to charge the equivalent of "multiple-carload" rates and "agreed" rates. It may discriminate among customers according to the evenness or lack thereof in their magnitude of consumption—the equivalent, on the railroads, of giving all-rail customers a better break on rates than those who use the railroads only in emergencies or to move their raw materials, their balloon freight, and their traffic imbalance.

There are two ways of protecting the necessary service of the genuine common carriers. One is by permitting these carriers to meet the rate competition of private and contract carriers, without prejudicing their regularly scheduled charges (i.e., exactly as the electric utilities have been permitted to meet similar competition). The other alternative is to tighten the limitations on contract carriers; and to forbid manufacturers from engaging in transportation, exactly as railroads are forbidden to engage in manufacturing.

Neither of these alternatives is pleasant—but the only other course, doing nothing, will bring on the financial ruin and socialization of the only genuine common carriers, which should be a still less attractive alternative. Railroad people will do a service to the country as well as themselves if they will keep this common carrier function in the forefront of their discussion of transportation problems; not forgetting to mention the necessary curative measures, however unpalatable. Halitosis never gets cured until some friend proves himself courageous enough to tell the sufferer he has it.

DRAFT GEARS AND SPRING SNUBBERS

Everybody understands the function of effective, well-maintained draft gears and spring snubbers in cushioning the shocks of freight-train operation. Apparently, however, present draft gear and spring snubber equipment, as currently maintained, does not have sufficient reserve capacity to meet peak loads imposed in modern high-speed movement. Pertinent support for this assertion may be found in the following comment by railway operating and claims prevention officers:

"Our complaints [lading damage] have become more frequent with the advent of diesel power and long and high-speed freight trains."

"Certainly, rough handling and hard-riding cars are a real problem today. A good point for the carman to remember is that lack of maintenance of draft gears, truck and spring parts plays a great part in our difficulty."

"The necessity for improved freight-car cushioning is emphasized when we consider the difficulty in eliminating overspeed impacts. Carriers have made little progress in this, even when we inaugurate spot checks in yards by trainmasters, terminal trainmasters and general yardmasters.

"Since we all have had such little success in reducing overspeed impacts, it appears absolutely necessary that our equipment be improved with better draft gears and snubbers."

"There is no question that worn-out draft gears are responsible in many cases of damage charged to rough handling, and much good will come from proper maintenance and improvements in such equipment."

The point that damage to lading, ascribable to rough handling and riding, is no longer limited to particular commodities or territories is highly significant. One claims prevention officer tells of breakage of large slabs of stone, occasioned by vertical bounce at high speed—this in spite of care to protect the load exceeding loading-rule requirements. The cost of extra securement materials was borne by the shipper who still did not get his product delivered safely, but suffered delay and loss. The railroad, of course, was subjected to a heavy damage claim. Everyone lost from the attempted movement which, with adequate equipment and care in handling, should have been a source of profit to all.

Again, excessive losses in refrigerator cars loaded with fruits and vegetables are reported, partly due to the scarcity of crate materials and the poor quality of wood used in making these crates. One railroad officer says he doesn't believe anything can be done in this situation which will be more effective than equipping refrigerator cars with adequate modern draft gears and suitably snubbed long-travel truck springs.

Isn't it pretty clear—considering the requirements of modern, high-speed service—that too many cars are going around with substandard and undermaintained draft gears and truck spring snubbers?

Looking westward from the sand tower at the new K.C.S. terminal near New Orleans. All the buildings are of the same general construction, with concrete floors, steel frames and roof trusses, and corrugated asbestos-cement siding and roofs

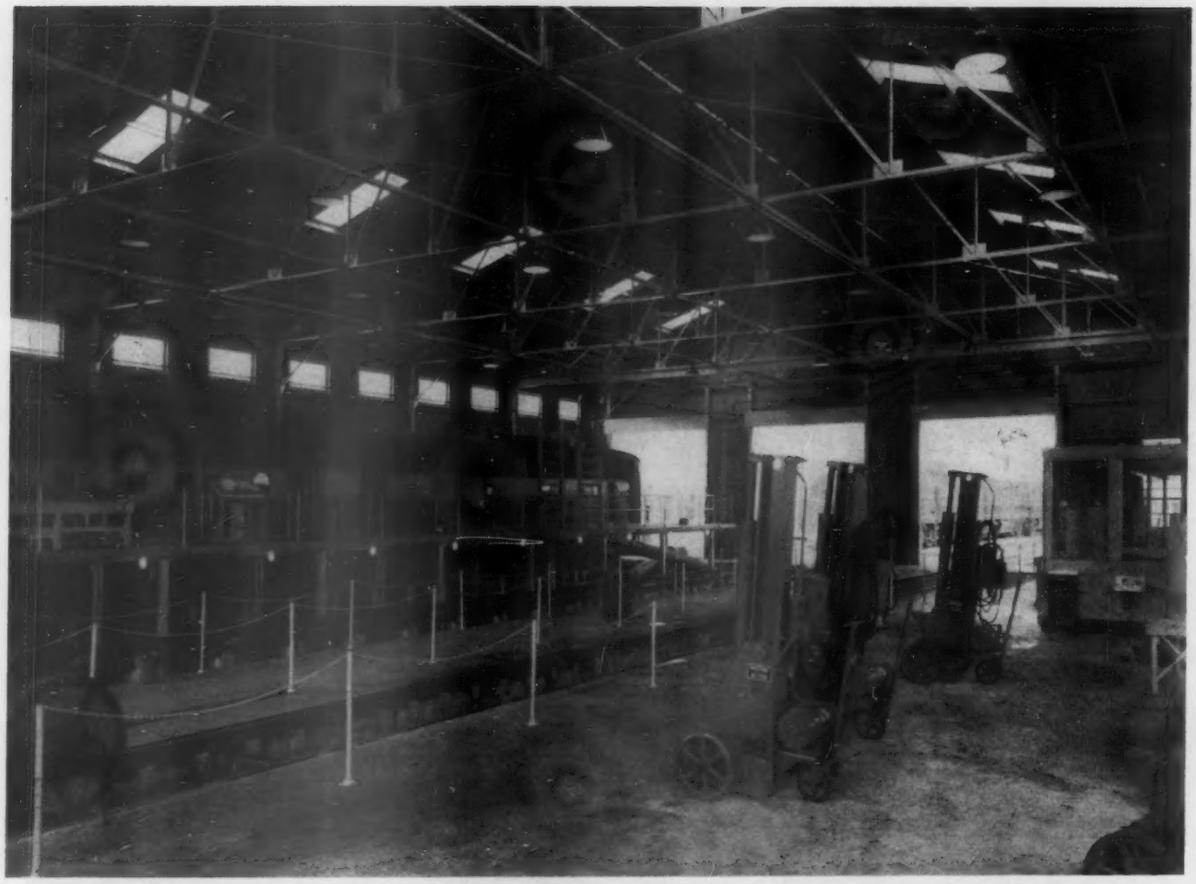
New K.C.S. Mechanical Terminal . . .

Has Complete, Modern Facilities

Maintenance and repair of diesel-electric locomotives and freight and passenger equipment is facilitated by construction just outside New Orleans

Tired of trying to take care of its diesel-electric locomotives at New Orleans with facilities never designed for this type of power, the management of the Kansas City Southern lines concluded that only a new terminal, built in an uncongested area and provided with conveniently located necessary appurtenances, would be adequate for maintaining the diesel switcher locomotives and for servicing the passenger, freight and switcher units handled at that point. In April 1950 the road began construction of the new terminal, including coach and car repair facilities, on a site adjoining its New Orleans switching yard on Airline highway, just outside the city in Jefferson parish. The railroad anticipates that the proximity of the now-completed terminal to the switch yard will also promote greater freedom of operation between transportation and mechanical departments.

Essentially, the new terminal consists of 15 buildings, 6 reinforced concrete platforms, 11 tracks that directly serve these facilities, and two other tracks, one of which skirts the terminal area while the other connects with



Skylights in the roof of the enginehouse and an adjoining storeroom were made simply by substituting a sheet of translucent corrugated plastic for an asbestos-cement sheet of the same dimensions. Additional light is supplied by 400-watt high-tension mercury lamps suspended from the roof trusses and by 100-watt vaporproof incandescent lamps installed along the sides of the elevated platforms and in concealed fixtures in the inspection pits

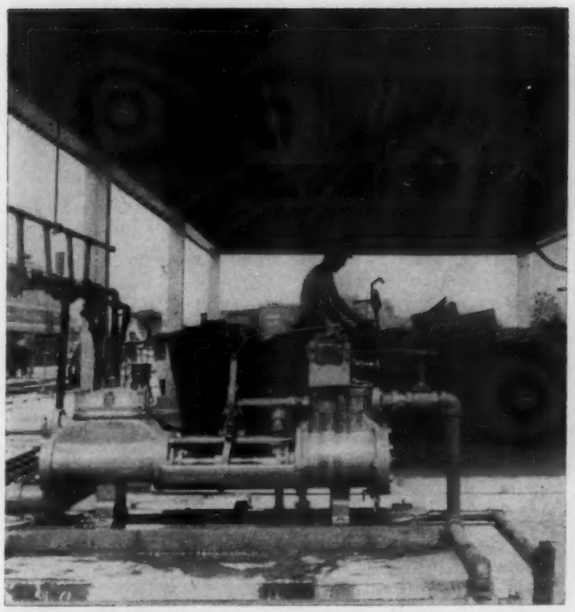
tracks coming from the other end of the yard to form a wye track. The locomotive facilities consist of a three-track diesel shop, a wash-off platform, a water and fuel-oil servicing platform, a house for lubricating oil drums, a sanding station, a gas-cylinder house, an oil pumphouse, a water-treating plant, an ice house, and a wash and locker building for the use of trainmen and enginemen. The car-servicing facilities consist of a lumber shed, a scrap platform, an air and "dope" house, a storeroom and car foreman's office, a car men's wash and locker building, and Pullman servicing facilities. Other facilities also built at this time include a power plant and a yard office.

In the preliminary phase of the construction more than 98,000 cu. yd. of fill, chiefly *batture* sand dredged from the river bank and shallows, was moved in to build up the terminal area of about 15 acres to the level of the surrounding terrain. This silt-like sand has better drainage qualities than clay or hard fill, and is the best material that could be obtained locally. However, because the groundwater table is so close to the surface, more than 300 40-ft. piles were driven to support the large structures and those concrete platforms which would carry heavy loads. The piles were untreated where the heads were driven at least 3 ft. below ground line, but those that project above this elevation were given a 12-lb. treatment of creosote. For the smaller buildings, footings were poured on dummy piles about 5 ft. long.

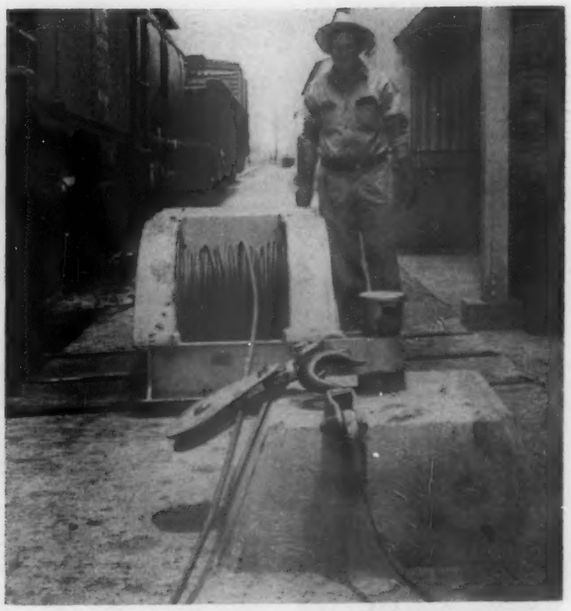
The shallow gable roofs set on rectangular structures give all the buildings a similarity in appearance. With few exceptions, the buildings are all of the same general type of construction, i.e., concrete floors, steel frames and roof trusses, with corrugated asbestos-cement siding and roofing. Also, the interiors of all offices are identical in appearance, having floors of concrete overlaid with a two-tone asphaltic tile and with wall bases of the same material; wainscots of 3/16-in. Flexboard, 42 in. high; walls of ⅛-in. Flexboard above the wainscoting; ceilings of semi-accoustical tile; steel-encased windows with pivot sections; and fluorescent lighting. All walls are painted pale green above the wainscoting and a darker shade below.

Features of Diesel Shop

All three tracks entering the diesel locomotive shop have long inspection pits. Two are stub-end tracks while the center one is a through track. One of the stubbed tracks, laid at floor level, is used largely for servicing the switcher locomotives, although it is also used for changing out trucks and wheels. It is flanked on one side by a wide machine-shop area and three large wire-enclosed cages, which provide work and tool-locker space

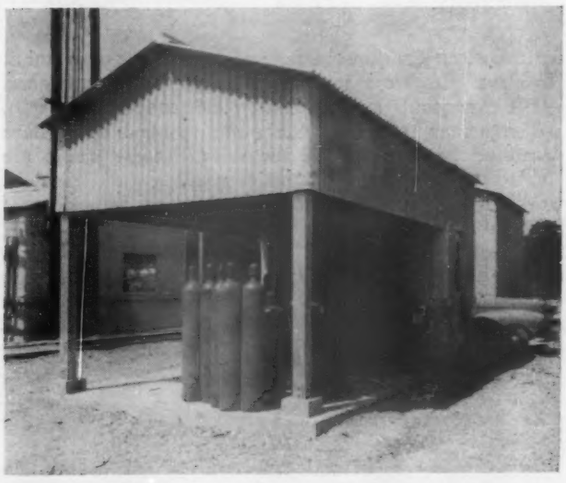


Lubricating oil is pumped to supply outlets in the enginehouse from a nearby drum shed. The workman inserts an intake pipe into one of the drums and the pump does the rest

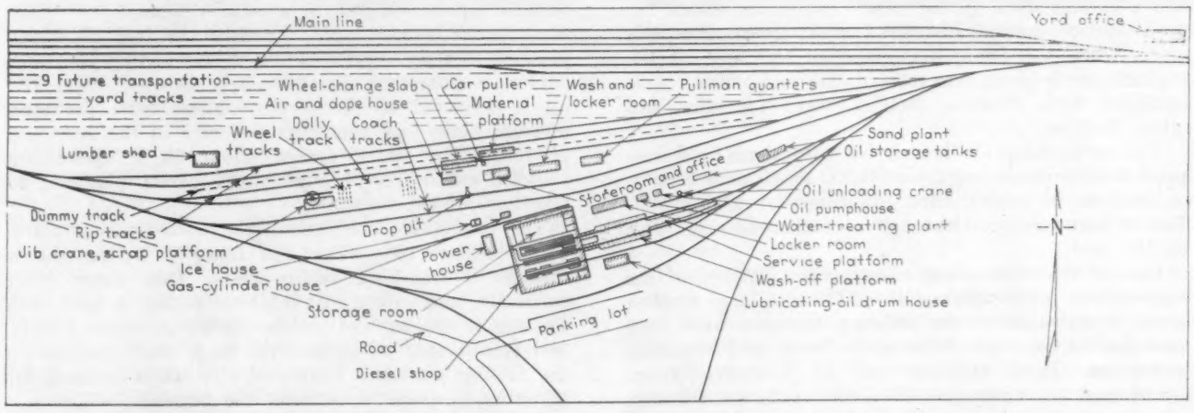


This car puller, through strategically located snatch blocks, moves cars on both the coach tracks and the freight car rip tracks. A small winch drags the car hook where needed

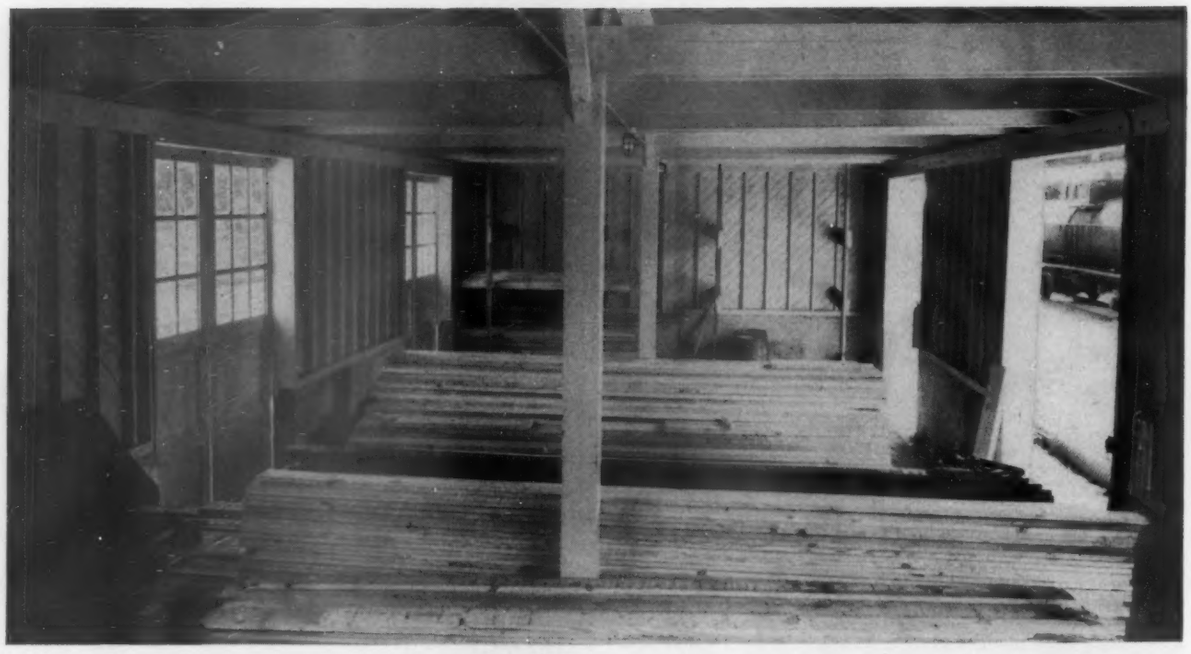
Ice cakes are stored in this small insulated building which is elevated to facilitate loading and unloading



Oxygen and acetylene gas cylinders are stored on the covered platform while fusees and other explosives are locked up



Sketch showing the terminal layout. The curved tracks running off at the bottom of the drawing converge to form a wye



This shed for lumber used to repair freight cars is equipped with a portable air-powered saw

for the electricians, welders, and locomotive mechanics. No drop pits were installed in this shop; truck and wheel changeouts are handled by electrohydraulic jacks.

The center track and the other stubbed track have depressed floor levels and the rails of these tracks are carried on continuous concrete supporting walls. Elevated working platforms have been provided on both sides of this stubbed track and on one side of the center track. An unusual feature of the elevated platforms, which are of reinforced concrete, is that they are supported on columns and beams of 127-lb. scrap rail. To facilitate the use of mechanical handling equipment the various levels are connected by ramps at both ends of the elevated platforms.

The Parts Storeroom

A parts storeroom and storekeeper's office adjoin the elevated platform of the second stubbed track. The storeroom is connected with the storekeeper's office and is directly accessible from the diesel shop on one side and a loading dock on the other. Two other offices, for the shop foreman and his clerk, adjoin the storekeeper's office, while the remaining space on this side of the enginehouse is given over to two wash and locker rooms equipped with showers, Bradley wash fountains and other facilities.

The enginehouse is heated by natural-gas-fired suspended units producing from 90,000 to 150,000 B.t.u.'s, as desired. It is ventilated by means of a Swartout-Dexter heat valve and through a continuous ridge vent on the roof.

One of the outstanding construction features of the enginehouse is the lighting. In addition to large window areas in the walls of the building, skylights have been provided in the roof of the service shop and adjoining storeroom. These skylights are of Corrulux—green, translucent, corrugated plastic sheets of the same dimensions as the asbestos roofing sheets. The plastic sheets were simply substituted for the asbestos sheets whenever a skylight was required. Electrical illumination is provided by 400-watt high-tension mercury lamps suspended from the roof trusses, while 100-watt vaporproof incandescent lamps, installed along the sides of the elevated platforms and in concealed fixtures in the inspection pits, provide additional light on dark days.

Outside Servicing Facilities

The first stop of a locomotive coming into the shop is at the sanding tower where sand is blown from an open concrete storage bin to the tower as needed. Continuing toward the diesel shop, the locomotive passes two fuel-oil storage tanks set on concrete cradles. These tanks together hold about 21,000 gal., or enough fuel oil to last about 5 days.

Fuel oil is pumped into the storage tanks from tank cars spotted on an adjacent track. The suction line is of the "jackknife" type which permits over-the-top unloading by a Blackmer rotary pump, having a capacity of 225 g.p.m., located in a nearby pumphouse. This same pump is also used to deliver the fuel oil under pressure to three service outlets at the fueling platform. All oil is pumped twice through a Bowser filter. The oil is delivered to the service outlets from the tank through pipes laid beneath the center of the servicing platform. The risers, spaced about 45 ft. apart, are installed in sleeves through the concrete platform to take care of expansion.

The locomotive then passes the water-treating plant, which utilizes city water and treats it by passing it through a Dearborn zeolite plant. This water, after treatment, and with a rust inhibitor added, is used both for engine cooling and for the flash-type steam boilers, and is delivered to locomotives from risers located on the fueling platform. Untreated city water is used for all other purposes throughout the terminal.

The tracks for the car-servicing facilities are divided

by the buildings and platforms into two groups, one for passenger equipment and the other for freight cars. There are two coach tracks where that equipment is cleaned and serviced, and three rip tracks for the freight cars. A dummy island track is constructed between two of the rip tracks.

An electric-powered car puller was installed alongside the rip tracks and an arrangement of snatch blocks was made so that the car puller would be effective for both the coach tracks and the rip tracks and would permit cars on any of the repair tracks to be moved in either direction. In addition to spotting cars for repairs the puller is used to pull an entire passenger train in position for the stand-by facilities used in air conditioning. A smaller winch was installed at one end of the rip tracks to facilitate the work of dragging the car hook of the pulling cable to where it is needed.

The Lumber Shed

The lumber shed contains car siding and other lumber for making repairs to freight cars. This building has a 12-in. air-powered saw for cutting the lumber to proper lengths.

Between the lumber shed and the main car repair facilities is the storage space for car wheels. A small crane is available here for loading and unloading wheels from freight cars. Next to the wheel-storage space is a tool house for the car department. Near this building is another which in part contains an office for the car foreman and a small stores and parts room. The remainder of this building is open at one end and on the sides and contains a small forge and other equipment. Next in line with these buildings is a wash and locker building for the car department workers, and another building containing Pullman quarters and supplies.

Between the car-department facilities and the diesel shop are two small buildings—a small but adequate ice house and a gas-cylinder and explosives building which is partly open-sided. Fusees, torpedos, and other explosives are kept in the closed portion of the latter structure, while cylinders of oxygen and acetylene gas occupy the open-sided space.

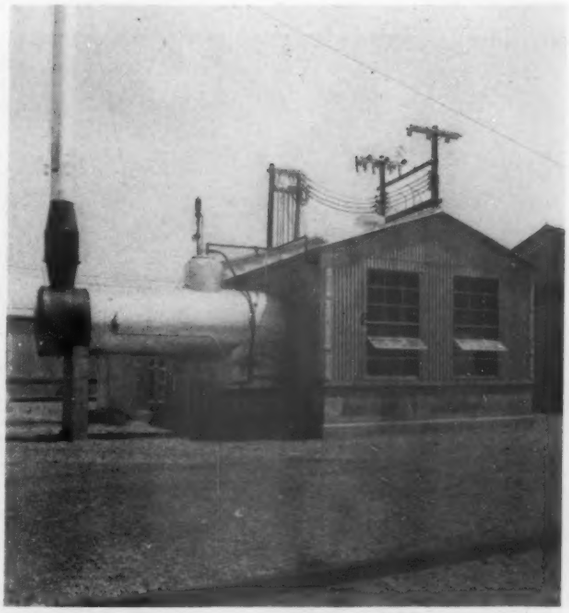
Power Plant Uses Old Boiler

The power plant is perhaps the most interesting building in the new terminal. Jutting out of its side is the boiler for supplying steam to the entire yard. This boiler has had an interesting life which began as a coal-fired boiler on locomotive No. 74 of the predecessor Louisiana Railway & Navigation Co. In 1931 it was converted to burn oil and was installed as a stationary boiler in the old shops at New Orleans where it remained until it was moved to the new power plant, at which time it was converted to burn gas. Complete automatic controls were also installed.

The power plant also houses the master electrical control panels and an air compressor. The compressor is a motor-driven Ingersoll-Rand unit having a capacity of 200 cu. ft. per min. This building also will be the fire headquarters as soon as the fire-fighting program is fully organized. In this connection, all fire-fighting apparatus, especially hose connections, is interchangeable with the equipment of the Jefferson Parish fire force. That organization also has been made familiar with the entrances to the yard and with the location of all fire hydrants.

The yard office is another new structure and consists of a one-story building having a flat roof and wide overhanging eaves. This building is air-conditioned and houses offices for the yardmaster, his clerical staff, a telegraph office, and a wash and locker room for yard personnel.

This project was carried out under the general direction of E. F. Salisbury, chief engineer, in collaboration with L. W. Van Nattan, superintendent of machinery. The construction of the tracks was under the direct supervision of W. C. Borchert, division engineer, while the buildings and other structures were built under the direct supervision of A. E. Willahan, assistant engineer.



The powerhouse boiler has an interesting history. It began its career on an engine of the old Louisiana Railway & Navigation line, was converted to oil firing and used in the power plant of the old terminal, and is now gas-fired for use in the new terminal

The yard office is entirely air-conditioned. It houses offices for the yardmaster and his clerical staff, a telegraph office and a wash and locker room

New K.C.S. Mechanical Terminal...

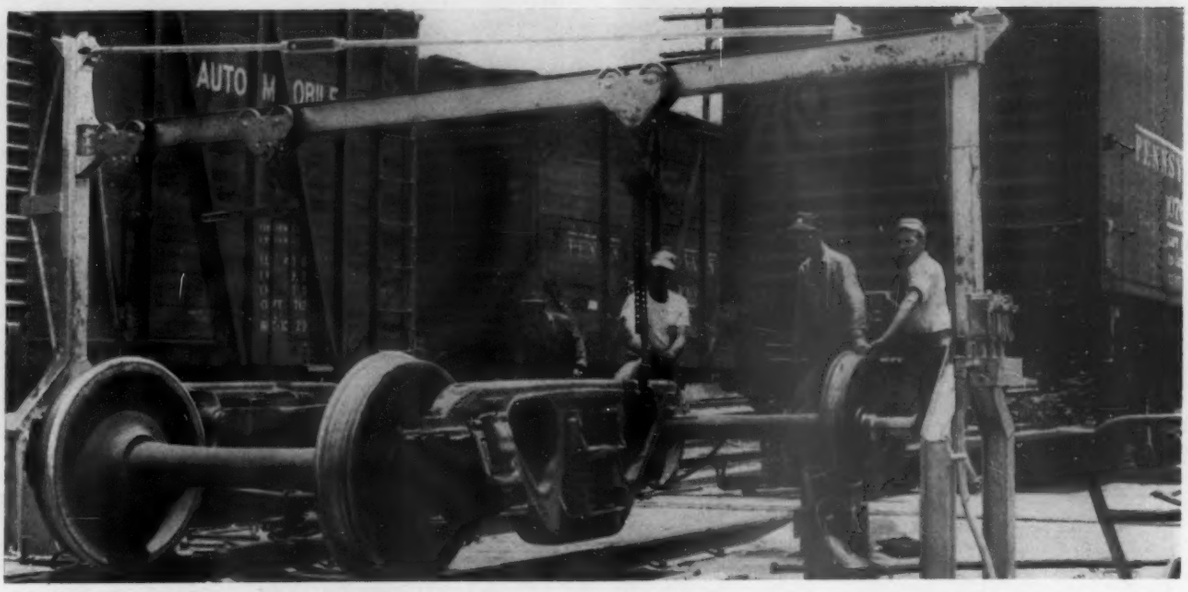
Improves Workmanship and Output

Diesel locomotive and car repair facilities have the latest equipment including some innovations developed by the shop forces

Fourteen switching locomotives are maintained completely at the new mechanical terminal of the Kansas City Southern at New Orleans, and a total of about twenty units, including freight, passenger and switching, are serviced daily. Daily through annual inspections are given to all classes of power assigned to New Orleans—the 14 switchers and 11 road units. The overall maintenance policy is a combination of some progressive maintenance with general overhauls at specified intervals.

All repairs, including general or classified, are given to switching units. Passenger and freight units receive wheel changes, traction motor replacements, and all engine and other repairs except such extremely heavy ones as crankshaft work or air box blower repairs. Heavy maintenance of traction motors and main generators is done either at the K.C.S. Pittsburg (Kan.) shops or by outside concerns. At New Orleans all work except armature rewinding is done on smaller motors and generators. Repairs made to electrical controls and to mechanical auxiliaries include servicing of batteries

General arrangement of the diesel shop, showing the wire-enclosed parts repair rooms on the right

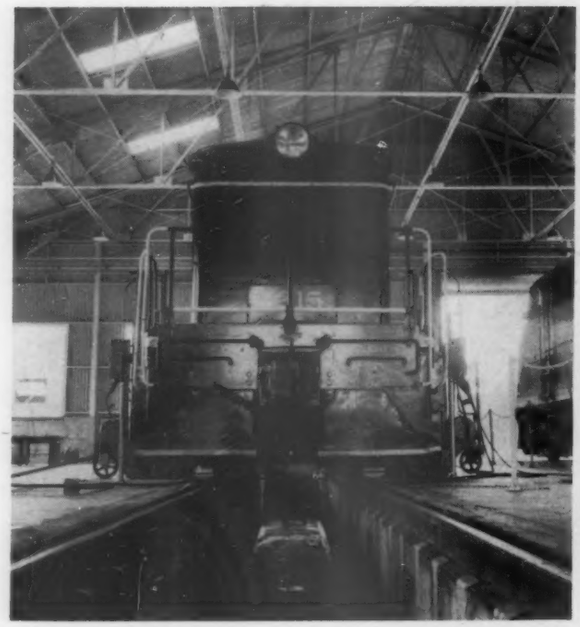


The A-frame arrangement used on the K.C.S. for dismantling trucks is permanently mounted

and inspection and maintenance of high voltage circuits, traction motors and main and auxiliary generator equipment.

The maintenance schedule calls for a thorough cleaning, inside and out, of switching locomotives every 6 days, of freight and passenger units daily. The cleaning work is aided substantially by the wash-off platform between the water and fueling station and the shop. This platform is concreted and serves the two northern entrance tracks to the shop, which are also the two tracks served by the fueling facilities and the sanders. The platform, installed symmetrically about these tracks, is 105 ft. long and 43 ft. wide. The concrete is extended 145 ft. on the end opposite the shop between the two entrance tracks only, this being the area where the fueling and watering facilities are located. There are three service outlets for each, permitting three units to be fueled and watered simultaneously.

Wheels and traction motors are changed out with a five-ton overhead electric hoist. Engine removals will



Truck changes are made with the aid of four 35-ton hydraulic jacks operated from a single portable control panel

Easy access to the locomotive roof is afforded by these wide step ladders, which, when not in use, are held vertical (left)

Dolly which is used for the easier handling of diesel locomotive body filters

Dolly for carrying mounted wheel sets which operates along the entire length of the wheel-storage tracks

be handled by a 10-ton hoist to be installed in the near future. No drop pit or transfer table is installed. Trucks are changed by rolling the truck straight out after lifting the locomotive with four 35-ton Whiting jacks operated simultaneously by a single portable control panel. Other shop machinery includes a 24-in. by 12-in. lathe, a 24-in. drill press, a 20-in. grinding wheel, a valve grinder, and a complete set of small tools, torque wrenches, impact wrenches, etc., for quick repairs.

Four piping systems are installed under the raised platforms. One system is for the quick supply and removal of lubricating oil. The second supplies radiator and steam generator water, and includes both treated and hot water. Air and steam lines, the latter used in conjunction with two steam cleaning units, are used for washing and cleaning locomotives.

The procedure for handling lubricating and other oils except fuel eliminates trucking between the source of supply and the point of usage. These oils are stored in an open-sided shed some 75 ft. from the diesel shop. When one of these oils is needed, one end of a length of pipe is inserted into the proper barrel and the other

end into a general distribution line. Turning on a stationary pump near the oil shed then furnishes a supply of oil as close as the nearest valve.

Several interesting innovations have been devised by the K.C.S. and included in the shop. Among these is an original method of access to the roofs of locomotives from the platform on either of the two north tracks.

Two wide step ladders are installed near the east end of the platform between the two north tracks with the bases mounted in the concrete. When not in use, the ladders stand vertically by themselves with no obstruction to the movement of men and materials. They are held in this position by a small flexible cable which runs through a pulley mounted on one of the overhead beams.

A counterbalance weight on the other end of the cable is heavy enough to hold the ladder upright yet light enough to have no effect on the ladder when it is tilted against the side of the locomotive.

Other devices developed by the railroad's forces to improve the efficiency and the quality of the work at the new terminal are a three-wheel, rubber-tired wagon for carrying locomotive body filters; a stand for holding and tilting drums of light oils and solvents which is controlled by a foot lever; and a rubber-tired oil container for oiling locomotive journal boxes.

Three wire-enclosed cages, each 19 ft. 9 in. by 18 ft., are placed along one wall of the diesel shop at the east end. These provide tool locker space and working space for smaller parts for electricians, welders and machinists.

Car-Department Facilities

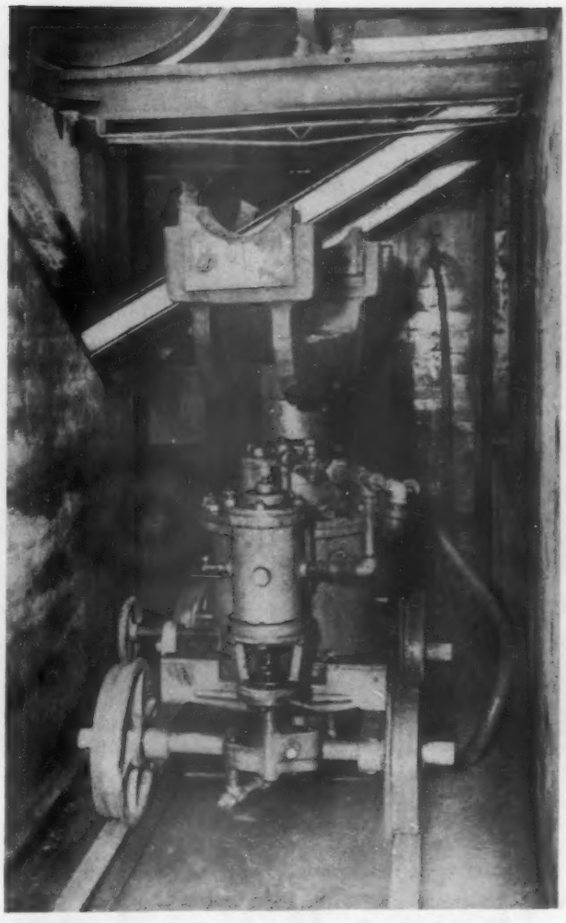
Although major repairs are not made at the new terminal to either freight or passenger cars, a substantial amount of heavy work is done. Passenger cars are serviced completely at this point.

Freight-car wheel changes are made with the aid of a concrete wheel slab on one of the rip tracks. To expedite wheel changes by making wheel sets accessible for ready application to both freight and passenger cars, the mounted wheel sets are carried between the slab area and the wheel-set storage area on a four-wheel roller-bearing dolly that runs on a narrow-gage track south of the south rip track. This narrow-gage track also extends to the near edge of the scrap platform. The use of the concreted platform with two hydraulic lifts has approximately tripled the number of wheel changes that can be made each day.

Truck and Wheel Change Simplified

The passenger-car department, like the freight-car rip track, has a highly efficient arrangement for truck and wheel changes. It consists of a drop pit and jack with a ground-level outlet track. These work in conjunction with two opposite 5-ft. lengths of split and hinged rail on the north coach track.

Referring to the illustration the procedure is as follows: The car with the truck to be removed is moved into position with one pair of wheels near one end of the split rails. The car body is raised sufficiently by hydraulic jacks for the body center plate to clear the truck center plate. The pit jack then lifts the truck by means of the cradle and holds it in this position while the two split rails are swung 90 degrees to line up with the remainder of the release track; one rail is pivoted about one end and the other rail is pivoted about the other end so that the two will line up with the release track rails after turning. The truck is then likewise turned 90 degrees and rolled out on the newly formed track combination for inspection and repair.



Passenger car truck changing arrangement showing the hinged rails and the diagonal support braces

This arrangement has proved an unusually good time saver. Before its installation removing a passenger-car truck required six hours work on the part of three carmen, three helpers and two laborers. With the new arrangement, two men do the whole job in forty minutes.

A five-ton mobile crane is used for a wide variety of material-handling work. It carries heavy materials, tools, packing and oil drums. It handles ice for servicing passenger trains and for some refrigerator car icing. It is also employed for loading and unloading all types of wheels from cars.

Miscellaneous tools found useful, both in reducing time required for repairs and in improving the quality of the workmanship, include $\frac{3}{8}$-in. and $\frac{3}{4}$-in. impact wrenches for application of running boards and similar purposes, a portable 12-in. pneumatic power saw for making and applying wooden running boards to tanks, air-motor-driven wood borers, a squeeze riveter, an air jamb and a rivet buster.

As no overall major paint work is performed, the painting facilities are not extensive. However, equipment is sufficient for the efficient handling of lettering, striping, stenciling, roof painting, some interior painting and shop maintenance painting.

"There's Better Living on the Rails"

By FITZWILLIAM SARGENT
Vice-President, the Budd Company

There are approximately 20 million people in the United States who can be enticed to travel—and this figure grows with the country. It has been estimated that ten per cent travel consistently—some for pleasure, some for business.

The crucial point of getting the mass percentage of these people is what we as railroad people are concerned with. What should we stress? How can we meet competition?

We know the basic values of railroad travel. Safety, dependability, comfort, freedom and room to move around and the many facilities and conveniences en route—in other words, better living on the rails than on any other form of transportation. But do the rank and file of our respective railroads and the general public know this? Apparently not. Look at the planes, buses and automobiles.

Are the Railroads Really Selling?

The railroads have a vast amount of fine, modern equipment—though by no means as much as they need. Before World War II streamliners were new and spectacular and required little selling. The public rushed to them. Since World War II, modern streamline passenger equipment has been taken for granted by employees and public alike. Its promotion has been inadequate.

What's Needed

First and foremost, we must reverse the opinion that passenger service is an unwanted child. I am not so sure but that the elimination of passenger service would mean the elimination of a substantial percentage of freight service, now considered profitable, as a result of shifting the passenger service share of overhead and facilities to freight operation. Right off the bat, if we take the attitude passenger service is necessary—and it is so stated, clearly, by management—there will be a lift in morale throughout the passenger service all the way from the ticket seller to the "car knocker." We will cease to take what we have for granted. We will begin to believe in what we have and will tell the world about it. The public will feel this immediately. Then we can really move.

Now, let's check the deep freeze.

We have mentioned **safety.** Everything is relative, of course, but do we really appreciate and sell the tremendous advantage we have in comparison with competitive forms of transportation?

Dependability. Again things are relative, but is there any form of transportation which can compare with railroads for day in and day out dependability? Are we driving this home across the land? I don't think so.

Next we come to **comfort** and here we spread out all over the place. Every living person has his or her ideas of what comfort should be. The combined efforts of the railroads and the car builders and the best talent they could employ has resulted in something pretty good. Where today, except on modern railroad trains, can you find travel comforts such as full air-conditioning, controlled heating, good lighting, good seating, complete toilet facilities, spaciousness and room to move around, and an almost unlimited opportunity for refinement in interior design?

Conveniences are many—so many more than competitive forms of transportation can provide. Think of the variety and quality of eating facilities aboard trains today, and look at the lounges with their refreshment services. With respect to baggage, we are in a class by ourselves as to the amount per passenger, whether checked or carried.

We have tremendous values to sell—values which every competitive form of transportation wishes from the bottom of its heart it also had. The reason for a large part of competitive success is that we have been outsold and outperformed in service and refinements of operation. Our competitors have exaggerated their values to make them look as large as they knew ours were and thus shouted so loud and often they finally believed it themselves, and so convinced the public.

Improvement to Continue

As good as present modern passenger equipment may be, it could be better, and better equipment will come to pass.

At the Budd Company we are continuing to improve on the present type of standard lightweight car. We feel that in this way the railroads can reap the most, not only from increased passenger revenue, but from savings in maintenance and operation. The modern streamliners can and do make money. This was definitely proved by the impartial survey made by Coverdale & Colpitts in 1950. The passenger revenue from such trains as the "Super Chiefs," "El Capitans," "California Zephyrs," the "Twin Cities Zephyrs," the "Bluebird," brings out clearly that the new fast equipment, plus the added attraction of Vista-Dome cars, really attracts steady customers. These trains are the talk of the nation—the "glamour girls" of the rails, but, even better, they are profitable.

The most recent development in this type car is the full-length dome seating seventy-six passengers with space underneath for a lounge. Currently two roads have bids from the various builders for a considerable number of this type. World conditions and Washington willing, these new cars can be put to work soon. They can "dog" up the consists in present name trains and attract new business without necessitating a whole new train.

[*Mr. Sargent went on to outline the development and application of the gallery-type suburban coach and the rail diesel car to various domestic and foreign railroads. —Editor*]

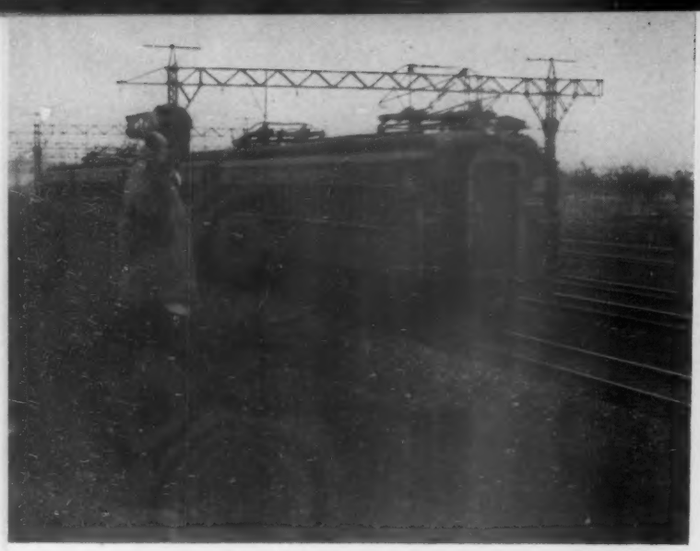
The National Association of Railroad Women recently asked Fitzwilliam Sargent, vice-president of the Budd Company, Philadelphia, to speak to them during their annual meeting at Santa Fe, N. M. Mr. Sargent complied — with a sales challenge posed not only to passenger traffic officers, but to every member of the railroad family. The accompanying article is taken directly from his talk except that some background material—with which *Railway Age* readers are already familiar—has been deleted.

We firmly believe that the railroads can carry the greatest share of the traveling public, and do so profitably. Let's tap that portion of the potential market. The desire for travel is greater now than ever before. Sons, daughters, and husbands come back home with glowing tales about the scenic wonders in America. Let's appeal to every group, but especially to the women. That slogan "Never underestimate the power of a woman" has never been truer than it is today.

For several years the Budd Company has maintained an active public relations service, which in cooperation with all the railroads has been "working all angles" to promote the fundamental value of railroad travel. We carry on an active women's program, not only in magazines and newspapers, but in the women's clubs. We hope that the cooperation of the railroads in this field will become even stronger in the future.

Competition with airlines, private automobiles, and buses is keen, but it is not insurmountable. Many factors are helping us—growing population, crowded highways, traffic accidents. The situation on the airlines has become intolerable to some. Their slogan "You can tell the man who flies" is certainly true, but not from a glamour standpoint. Just look around the average airport! Robert C. Ruark, a widely syndicated columnist, recently wrote: "We have had some beefs lately about the lousy conditions of airports everywhere, including La Guardia Airport here in New York, and I would like to re-echo the findings of a local staffer who went out yonder to see if it was as bad as the beefer said, and found it worse. . . . The average railroad terminal has a horror all its own, but it is a pink palace alongside the average airport."

Now, if the railroad terminal has a horror all its own, here is a challenge. Is it the difficulty of getting information, buying tickets, lack of courteous service, bad housekeeping, or inadequacy of red cap service, and what have you? Perhaps so, and if so, isn't it, like any house in disorder, a symptom of not caring, confusion, or poor management? Don't we need to convince ourselves as railroad people that passenger service can be profitable and do the things to attract the business that is really ours?



VANDALISM . . .

SABOTAGE . . .

Training Special Agents Today

By WAYNE A. JOHNSTON
President, Illinois Central

Railroad Police methods have come a long way from the days of the burly "cinder dick"

There was a time when a new man in the special agent's department was given a star and a gun and sent out among the box cars. The hobos and the crooks passed the word around—"Watch out for the new cinder dick!" That fellow was big and tough. He was picked because he could lick anybody that he had to, even if it meant throwing him off a moving train.

The same new policeman might be used as a strike-breaker and mix it up in brawls where heads would be bashed in. As a result, the police force on the railroads during certain periods was not popular. The other employees, understandably, viewed the special agent's department with something less than friendship.

Happily, that day is long past. Today, the special agent is a railroad man in the best sense of the word. He is a member of the railroad family, and other branches of the railroad look to him with trust and with admiration.

On the Illinois Central, we have a police force of approximately 250 men—the equivalent of a police force of a city of a quarter million population. In all, the American railroads have some 9,000 police officers. With the heavy demands placed upon police departments everywhere in the two big fields of crime prevention and traffic control, these 9,000 men are a valuable auxiliary to the regular police forces. Competent and well-trained, they represent a body of 9,000 law enforcers who help protect the public without being on the tax rolls.

THE ILLINOIS CENTRAL'S methods in selecting and training railway police officers were comprehensively described by President Johnston at a meeting of the Chicago Railway Special Agents & Police Association on November 8. This article, which is a condensation of that talk, clearly demonstrates the growing complexity of the railroad special agent's task.

It is not entirely as a detective that today's special agent is valuable to the railroad, important as that part of his work may be. It is as a fact-finder that the special agent shows his fullest worth, for the railroad depends upon him to serve as its eyes and ears. The special agent's department is a fact-finding department, to which we look for unbiased and accurate reports on what is happening on the railroad. An all-too-human failing is for individuals to color their version of an event to favor their position. The special agent is trained to cut straight through to the facts—he has no reason to exaggerate or distort.

The special agent in addition to being a good observer must be a good public relations man. No other department, except possibly the sales department, has as wide a contact with so many other departments on the railroad and with so broad a cross section of the public. The special agent is called upon to deal with the public in a variety of difficult situations, in accidents, thefts, riots. He has to work with people who suddenly have become ill, with people who have lost valuable merchandise, with juveniles who through pranks are endangering lives and property. The approach used by the agent in such situations, it is easy to see, greatly influences the attitude people are going to have toward the railroad. His ability to keep calm when all else is chaos has a great deal to do with the way the situation is going to turn out.

In recent years, we are giving more and more attention to the careful selection of men for the special agent's

ACCIDENT PREVENTION . . .

AND CONTROL OF TRESPASSERS are but a few of the many duties of a modern railroad police officer

All photos taken on the Illinois Central's Chicago Terminal division

department. Mere physical ability, the main qualification in former years, is just one of the requirements today. Our men today are selected for intelligence and balanced temperament. They go through the various tests set up by our employment bureau, tests that tell us something about their practical judgment, their personality, their aptitudes.

Fingerprinting of all new employees, including prospects for the special agent's department, has enabled us to weed out persons with undesirable records before they get into our organization, where their effect would be that of a rotten apple in a barrel.

Once he is on the railroad, the training of the new man is not left merely to the experiences he happens to have, but is guided by a program of regular instruction. Some railroads are doing rather more along these lines, and some rather less, but all are making progress in the education of the special agent on the job.

Police work on the railroad is almost totally different from police protection of a factory or a plant. The railway policeman working on a theft may be a thousand miles away from the place where that theft occurred. He needs all the help of modern scientific knowledge to determine first of all where the theft took place. Because of the large outside public involved in the railroad picture, the special agent is closer to a municipal policeman in his work than is a plant protection officer.

Training Never Ends

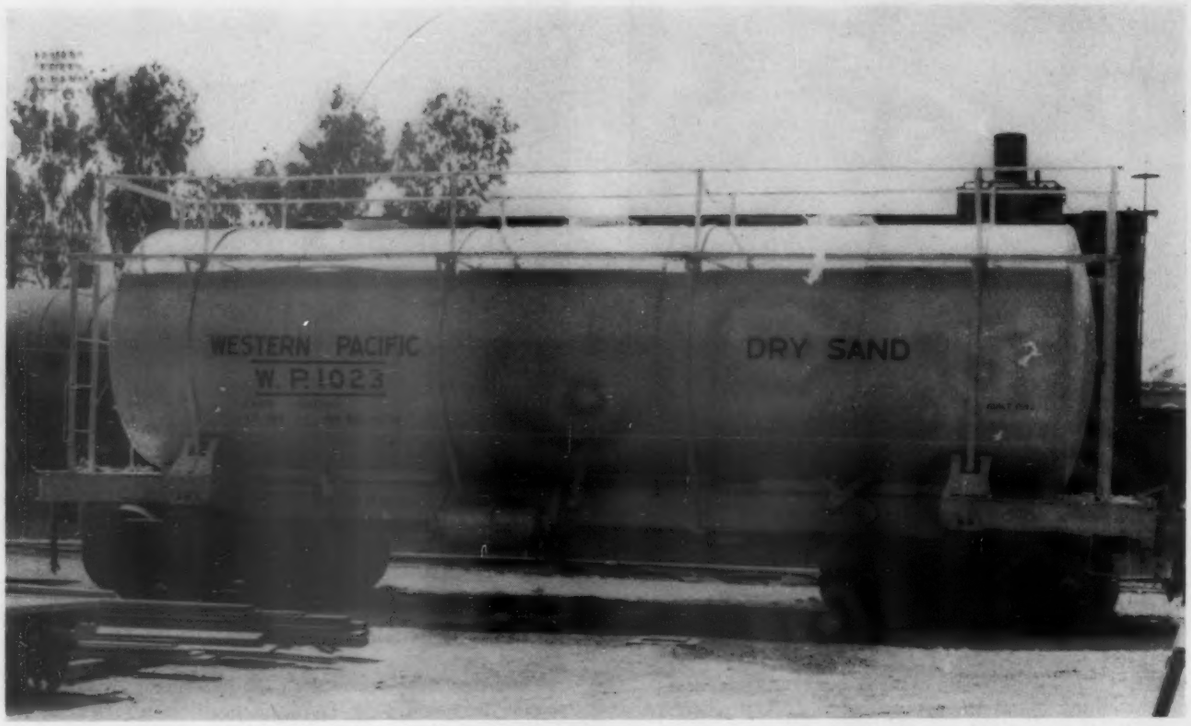
To start with, the new man gets a week's training in the office of the chief special agent, learning about the make-up of the department and something about our 6,500-mile railroad. Then, in the company of a training officer, he spends a day touring the passenger station while learning what to look for on our trains, in the baggage room and elsewhere. He spends another day at the freighthouse, learning something about the records and the loading and unloading of cars. He spends still another day out among the box cars in the freight yard, seeing trains made up and dispatched.

Once a month all members of the department attend a meeting designed to further their knowledge of railway police work. Instead of formal lectures or the reading of prepared papers, the men are led into discussion of common problems. Officers of the company from time to time are brought in to describe programs that are of importance to the railroad. The public relations significance of their work is brought home to the members of our railway police force. They are reminded that many of their duties are discharged under disagreeable circumstances in the presence of disgruntled people, and that they are in a position to impress the public with their courteous and fair treatment.

In addition to these meetings, where the men in the ranks are encouraged to speak up and ask questions and to discuss points of interest to them, other types of instruction enter the training picture. The Protective Section of the Association of American Railroads holds quarterly meetings for patrolmen on a regional basis. These one-day refresher courses bring patrolmen from the railroads in that region into contact with leaders in the legal field and in law enforcement.

This same section of the A.A.R. in May this year held its first national Railway Police Academy in Chicago. The program lasted a full two weeks with lectures and discussions which were on the university level. Those selected to attend were men from some 37 American and Canadian railroads who had shown themselves to be good teachers. Here they learned training techniques which would enable them to carry the message back to their individual railroads. They saw demonstrations of fingerprinting methods. They heard discussions on the railroads' problem in getting good personnel. They had demonstrations of scientific crime detection presented by the Federal Bureau of Investigation. They heard lawyers describe proper methods of making arrests, presenting evidence, and of making searches and seizures. Members of the Chicago Police Department gave a quick course in defensive tactics and in the proper handling of firearms. The sheriff of Cook County (Illinois) spoke on ways of cooperating with other law-enforcement agencies. Railway claim men gave talks on the investigations of freight claims. The students learned about first aid, fire-fighting, handling crowds, investigating train derailments, handling juvenile delinquents, policing passenger and freight trains, checking baggage claims and a dozen and one other subjects.

In other words, the program was recognition of the fact that modern railway police work has grown up. It is a many-sided occupation that calls for broad knowledge. It has become a profession that can be handled only by men who are able to keep up with the latest developments in the field of crime prevention.



Now the Western Pacific Distributes Dry Sand in Converted Tank Cars

Five fuel cars re-equipped with self-clearing hoppers and special unloading valves—Approximately $8 a ton saved by their use

Five tank cars, formerly used in black fuel service by the Western Pacific before the general introduction of diesel-electric power on this road, have been converted by a comparatively simple operation at Sacramento shops for transporting locomotive sand. A number of important advantages include saving about $8.00 a ton in handling, drying and processing the sand; also eliminating numerous old-type open sand bins and sand-drying equipment with attendant labor and fuel costs.

In preparing each car for this conversion work, the first operation was to clean the tank interior thoroughly. The existing dome was then cut out and enough of the top center course removed so that preshaped ¼-in. slope sheets could be lowered into the tank, suitably located, stiffened with angle-iron braces and welded in place to form three hoppers and make the car fully self-clearing by gravity in unloading. A side view of the car before painting indicates clearly the location of these hopper sheets by weld temperature marks which show through to the outside of the tank.

The opening on top of the tank was then covered with a ¼-in. curved steel plate seal-welded in place. Three 20-in. filling holes with hinged covers and locking pins were applied along the top center line of the tank, as shown in the illustrations, and a second-hand steel ladder, salvaged from older scrapped equipment, was cut to the desired length and installed in the tank at the center hatch to give access to the car interior if and when required.

For unloading the car, outlet pipes are installed, as illustrated, one on each side of the center sill at the low point of each hopper. This makes six outlets, three on each side of the car, and permits easy unloading at any terminal regardless of the direction of car movement.

As shown in one of the close-up views, each unloading valve consists of nothing more than a shop-made butterfly-type valve within the delivery pipe arranged off center so that the weight of sand keeps the valve in closed position until opened by the hand lever. Four graduated

Weld temperature marks show size and location of interior hopper sheets

The sand car top has three 20-in. filling holes with hinged covers and locking pins

Shop-made four-position outlet valve with metal end cap to prevent sand leakage

positions or stops of the valve regulate the amount of sand flow. A can-shaped cap slipped over the lower end of the outlet pipe is held in place by a cap screw. This prevents loss of sand en route by leakage through the butterfly valve, or in case the butterfly valve should be opened accidentally. The completed car is painted yellow and stencilled and is then ready for service.

The Western Pacific method of handling locomotive sand at terminals is based upon air-pressure lifting tanks placed in the ground so that their tops are about even with the rail top and adjacent to the ends of track ties. Then a leader pipe is attached from any one of the sand-car outlet valves, providing a means for sand to flow into the air-lift drum or tank. When this tank has been filled by gravity, valves are closed, the air pressure is turned on and sand is either blown directly into the locomotive sand box or into elevated towers such as the Ross & White type, from which the sand then flows by gravity to locomotive sand boxes.

Experience on the Western Pacific indicates that the use of these sand cars has greatly reduced the cost of handling and drying wet locomotive sand as previously purchased. The cars also provide sufficient sand storage capacity at most terminals to eliminate entirely the old-type open sand bins and sand stoves either fired by coal or oil, or heated by steam coils. Sand from these cars is not handled by hand from the time the car is loaded at the plant until it is emptied and forwarded to the sand plant for reloading. This is the most important single factor in the saving mentioned of $8.00 a ton for handling, drying and processing locomotive sand on the Western Pacific.

A newly arrived car containing both sacked and container mail. Each container holds the equivalent of approximately 14½ sacks of mail and can be handled in a small fraction of the time required for individually handling the sacks. The containers, which are specifically designed for mechanical handling, can be stacked two high

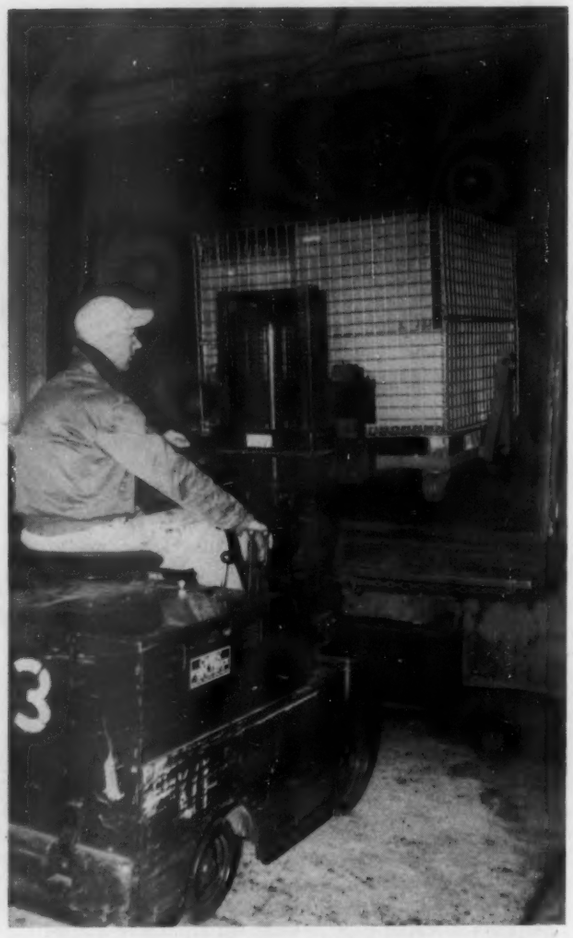
This powered hand jack is hoisted into the car by a fork-lift truck, and is used to move the stacked containers to the car door. The fork-lift removes the top container first—lifting it up while the jack moves the lower container out of the way of the door. When passenger-train box cars are used, two containers at a time can be removed by a fork truck

Mail Containers Now Move Coast-to-Coast

In an all-out campaign to reduce the cost of handling fourth class mail (parcel post) the Post Office Department, in cooperation with the railroads of the country, is gradually extending the use of palletized, collapsible containers. These containers—the subject of experiments last year, as reported in *Railway Age*, December 16, 1950—make possible the mechanical handling of this bulky mail which previously had to be handled almost exclusively by hand. They have proved so efficient and economical in actual service that their use has been extended to daily transcontinental runs over the New York Central, the Pennsylvania, the Milwaukee and the Great Northern between New York, Chicago, St. Paul, Spokane and Seattle, on a skeletonized basis. Orders have been placed for approximately 1,000 additional containers to "flesh out" this operation, with delivery expected about next spring.

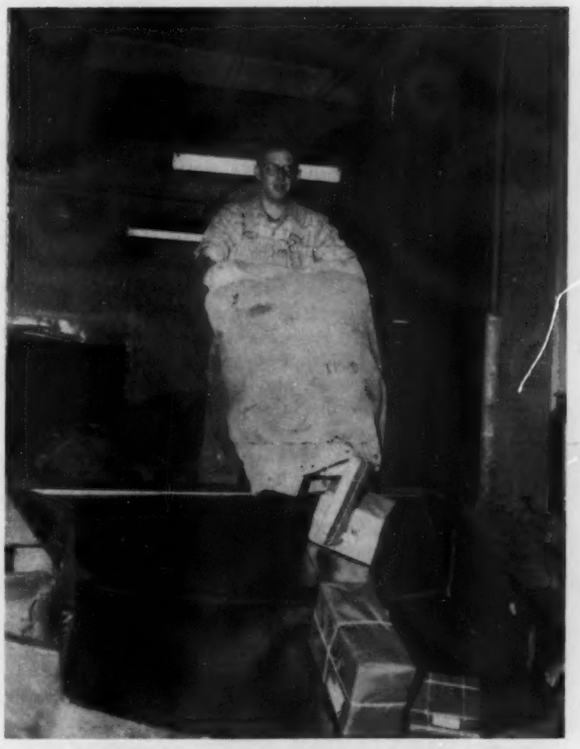
Normally, fourth class mail is handled in mail sacks—though, as a matter of practice, 20 to 25 per cent of the parcels actually are too large to fit in sacks. These are known as "outside parcels" and must be handled individually, at further expense in time and labor. These new containers are large enough to accommodate all "outside parcels." In addition, the containers are collapsible so they can be moved from post office to post office easily in the event of unevenly balanced mail movements.

These illustrations—from photographs taken at the Spokane mail terminal—show how the use of containers expedites and simplifies mail handling.



After having been moved from trainside to the truck door in "trains," the containers are loaded into trucks for movement to the main post office. Here the container rests on a dolly specially designed for movement in "trains" around station platforms and within the post office

The container is lifted out of the car door with a fork-lift truck and placed on a 4-wheeled dolly, or on a conventional baggage truck, for movement to the post office. With car-level platforms essentially the same procedure is followed



At the Spokane post office, sacked mail is opened by this clerk and dumped down a chute which carries the individual packages to a moving belt which passes between sorters who pick the packages off according to final destination

With the new container, hand dumping is no longer necessary. Using the same chute, a fork truck lifts the container, catching the far side on two projecting hooks. The contents spill into the chute when the rear side is opened

THIS TRUCKER MISCALCULATED
—He damaged his truck instead of just the highway

"The Battle of the Century"

By RAY SCOTT
Editor and Manager, Brotherhood of Locomotive Firemen & Enginemen's Magazine

For years we have written about the heavy highway freighter, the subsidies it enjoys, the cost it increasingly imposes on the taxpayer through the heavy damage it does to highways and the unfair competition it offers to railroads.

The seriousness of this problem was recognized by our brotherhood through its official publication many years ago. Indicative of the attention given to this ever-growing menace is the following quotation from an article which appeared in our publication 20 years ago.

"In the ever-widening use of the motor coach and truck as a means of passenger and freight transportation there has arisen a giant which is grappling the railroad industry in what may be termed the 'Battle of the Century.'"

However, until recent years the public gave little heed to this point of view. Public officials dismissed these facts and figures as being prejudiced and therefore unworthy of either notice or action.

But in the past two years the "Battle of the Century" has begun in earnest. Public officials, the press, and people who use the highways everywhere, have become awakened to the things that many in the railroad industry have known for years and tried to tell. They have become aware that the trucking industry is largely a lawless industry, paying little or no heed to state laws on weights and sizes. They have come to realize that heavy interstate trucks are usurping the highways, exploiting them for private profit and paying a pittance for the ill-gotten privilege. They likewise are becoming cognizant of the wholesale death, injuries and wanton destruction directly attributable to these self-appointed "kings of the road" who barrel along half awake, throwing even the very rudiments of safety to the winds.

Feeling Its Oats

To understand why there has been a general change in attitude toward the heavy trucks it is necessary to understand, also, what the truckers have been doing since their industry began to grow in the early thirties.

Back in 1933, when the big truck industry was first beginning to feel its oats, truck manufacturers and over-the-road truck operators realized they could make a great deal more money if state laws governing the size and weight of trucks could be "liberalized" in their favor. They realized further that their industry could not ask for more liberal use of public facilities purely for private profits. They had to create some semblance of public interest.

So they formed a front nicely called the National Highway Users Conference, secured for it liberal financing by automobile, tire and oil companies, and began making pleasant alliances with such bona fide organizations as the American Automobile Association, the National Grange and many others. The title "National Highway Users Conference" was designed, of course, to impress an unwitting public. It had the solid sound of an apparently voluntary movement that protectively embraced all the highway users and provided a beautiful natural cover for the big boys. They were able to hide among the millions of small truck and automobile owners and make their cause appear identical with that of a whole motoring nation.

Thus reinforced with what seemed to be the stamp of public need and approval, and bolstered by respectable allies, the conference—the lobby, I should say—went to work. Its pattern of operation in the various state legislatures was almost identical. It sought enactment of legislation to liberalize axle load limits, permit greater maximum loads—the use of bigger trucks. It fought toll roads, kicked about weight limits and deplored gasoline taxes. Through its alliances it was able to persuade representatives of motor clubs and rural letter carriers, as well as farm and dairy organizations, to appear before the state legislative committees to fight vigorously for laws that helped heavy trucking and against any that hurt it.

This proved to be one of the smoothest, most effective public relations programs ever devised. It had everything—soothing talk about gentlemen-of-the-road truck drivers in whose mouths butter wouldn't melt, a hard and clever hand behind the law-making scenes, a forceful and open-handed persuasiveness that steam-rollered

From an address to the American Railway Magazine Editors' Association at its annual convention, White Sulphur Springs, W. Va., November 2.

all opposition. From 1933 to 1950 the history of highway legislation in the 48 states was one of almost unbroken success for the heavy truckers. For example, in the eight years between 1941 and 1949 when heavy trucking really began rolling with a destructive vengeance, 13 states joined the ranks of those permitting truck weights to go to 35 tons, and eight more swelled the theretofore small ranks of states allowing 30 tons.

During the war the heavy trucking industry succeeded in getting every state to suspend the laws that protected its right-of-way. The results were disastrous to an interstate road network which had never been designed to withstand the pounding of the ever-growing army of overloaded trucks. The truckers saw in the emergency an opportunity to fatten their private purses, and they took it without giving a single thought to the cost it must exact from the public.

The Author

Born—An Octopus

The wartime moratorium on truck size and weight was finally lifted, but it had bred an octopus. Big truckers, enjoying laws far more liberal than they had ever been before, being dissatisfied even with these after the war, began to abuse the roads with renewed vigor. They felt secure and confident now in their success. They got cocky—lorded it over anyone who got in their way, rushed along the highways with better than freight-car loads at excessive speeds, ignored brake testing, and cheekily forfeited bond after arrest for violations.

Overloading became a tremendous problem for state police. Estimates of its prevalence among the heavy truckers range from 6 to 50 per cent. Many a fleet-owning company profited so handsomely from overload gravy that the penalties in no state worried it. Although several states generously permitted gross weights of over 50 tons, the operators deliberately piled on the payload, figuring on the inevitable fines as part of the operating overhead. In less than two years' time the drivers of a single company were arrested 722 times in a single state for overloading alone.

The highway problem would have been extremely serious even without the weight violations. Big trucks had grown like weeds in both size and number. The heaviest types had multiplied 1,300 per cent in less than two decades, and in one the amount of freight they carried swelled from 51 billion ton-miles to 115 billion.

By 1950 the damage they were doing could no longer be ignored by state officials. The American Automobile Association evaluated the public loss in billions. Then, by 1951, the state governments, in response to a query put by the Congressional Joint Committee on the Economic Report, estimated their highways were in arrears to the tune of $41 billion, maintenance-wise alone—with no future construction or much needed expansion being included.

Shifting the Blame

Big truckers were not impressed. They excused themselves, and at first blamed the weather for highway deterioration. Then, when it became clear that they were no longer believed in many state capitals, they turned on highway departments with a variety of accusations. They said poor highways were due to faulty material, dishonesty, misuse of road building funds and poor workmanship.

Several years ago in a convention, the state governors' conference discussed the matter down to its most distressing detail and voted to ask the Council of State Governments for a national study. The council reported back in 1950, and its findings were unanimously endorsed by the governors. The council report fixed the blame for road damage squarely on heavy trucks and came to two conclusions: that every state should carefully determine its highway finance needs, and that it consider enactment of new highway-use measures that would more equitably distribute taxation. Failing in the latter, increased gasoline taxes and license fees would be the next best step.

The governor of Ohio was greatly impressed with the need for prompt action and appealed to the truckers themselves. Would they not, he asked, withhold action in their continual state-by-state drive for more favorable trucking legislation until some means could be found for getting to the root of a great national emergency? The truckers only laughed at him.

The Maryland Road Tests

So the governor acted. He was instrumental in having the highway officials of 16 midwest and eastern states organize the Inter-Regional Council on Highway Transportation. Last December, after a six-month road test in Maryland, the Inter-Regional Council came up with some significant results. A typical modern highway, it found, will show only moderate wear under a single-axle load of 18,000 lb., which is the limit now endorsed in 34 states. But, as the axle load goes up, the damage it does is intensified at an increasingly rapid rate, so that a 22,400-lb. load—still legal in several states—while only 25 per cent greater than one of 18,000 lb., steps up pavement cracking 1,000 per cent. Through the use of heavy trucks, the tests dramatically demonstrated the great damage they were doing.

Long before the tests were completed, the big truckers, who themselves had furnished test trucks for the work, were shouting "fake" and launching a new barrage of propaganda to the effect that highways capable of supporting the heaviest vehicles should be provided as their just due.

Thus were the lines of battle drawn as 1951 was born and the legislatures of 44 states gathered in the capitals for a fresh assault on the problem of highway financing. Except for the support of the governors and the now aroused newspapers, the legislators were to go it alone. For the most part the public was still apathetic. There in the path of corrective highway legislation stood the old enemy, the big truck lobby, badgered and exposed now by the press but still a formidable foe. It no longer tiptoed as it once had but elbowed its way boldly into

CHRISTMAS...AND EVERY DAY!
IT'S NOT HARD TO FIGURE OUT WHAT EVERYBODY WANTS
Dear Santa: I can't do without my Trains! John Q. Public
Dear Santy: I WANT A Model Train American Boy
U.S.A.
Dear Santa: I've got to have TRAINS! Uncle Sam

* * *

committee hearings and floor debates, pulling the strings of its own puppet legislators, and creating confusion by a welter of counter measures.

The truckers, so used to having their own way, were definitely thrown on the defensive. More than a third of the 44 state legislatures meeting this year were able to increase their highway user fees, among them Illinois, which culminated a bitter five-year battle by boosting license fees $20 million a year. New York and Idaho replaced antiquated laws with new weight-distance taxes that would make the heavy trucker pay more nearly his fair share of highway use. In addition to Illinois, 10 states raised truck license fees. Seven increased gasoline taxes and nine the levy on the ever more popular truck fuel, diesel oil.

Perhaps the most dramatic development was in the state of New York. Under its old laws heavy trucks were paying a fourth of what motorists were, proportionately, in gas taxes and license fees. As of October the comparative rate was raised to half.* And, better to fight weight violations, new weighing stations are being installed for 24-hour checking.

The highway tax structures of too many states still discriminate heavily against the private motorist and light-truck owner, seriously fail to penalize the weight-limit violator, and fall far short of meeting all-important highway expenses.

Moreover, the trucking industry has an atrocious safety record. According to James K. Knudson, member of the Interstate Commerce Commission, trucks and buses are taking an increasing toll of lives in road accidents. "Highway accident deaths involving such vehicles had risen from 3.67 per cent of all reported accidents in 1940 to 5 per cent in 1950," was his dramatic statement in an address to the National Safety Congress held recently in Chicago.

Considering the generalities of statistics of this type, and the ability of the truckers to generate serious accidents in which they themselves are not involved, no one would hazard even a guess as to the number of casualties for which they are really accountable. Insurance companies have increased rates for property damage coverage on trucks an average of 18 per cent in 28 states since June 1, while cost of bodily injury policies has been raised 15.16 per cent in 12 states. These sharp advances are based on judgments and settlements—not statistics.

We on the railroads are fully cognizant of how truckers hauling inflammable liquids spray trains with death and destruction. What will happen if any one of the 60 motor carriers now seeking such authorization is successful in getting its trucks into the door of the I.C.C. and begins transporting dangerous explosives on the public highways? Under proper circumstances just one vehicle so laden could cause devastation of atomic proportions.

Truckers have asked for an all-out war at a time when we have very strong allies. We must meet their challenge effectively by supplying our readers the proper ammunition to insure victory. The "Battle of the Century" is gathering momentum. Who has more at stake than we of the railroad industry *to make certain that it is won!*

* Collection of New York's new weight-distance tax has been at least temporarily stopped by an injunction obtained by truck operators, but other features of the law are in effect.

Letter from a Reader . . .

Roller Bearings for Freight Cars

CHICAGO, ILL.

TO THE EDITOR:

Upon returning from a recent convention, I met one of our rip track foremen. He looked haggard and worn and when I inquired about his health, I learned he had just stepped off the wrecker and that this was the sixth derailment he had been out on in one week. Every one had been caused by a hot box.

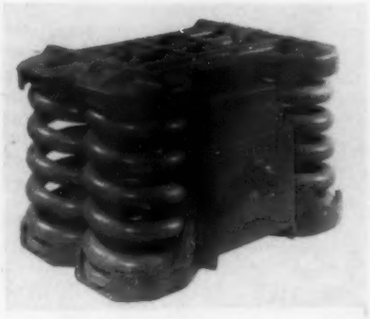
I asked him how many hot boxes per day we have on the railroad, and I got this reply: "I have already had 534 hot boxes this month between Topping and Granite City (a distance of about 80 miles), and God only knows how many we have had on the railroad." He then proceeded to "lay me out" because I had not done anything about getting roller bearings on freight cars. This man worked with me when I applied roller bearings to the traction motors on some gas-electric cars in 1925, and is familiar with the difficulty we had to prevail on management at that time to sanction the application of such bearings.

While at the convention, I talked with representatives of roller bearing manufacturers about their application to freight cars. They told me that the reason it is not being done is that railroads are reluctant to spend money for roller bearings which will not operate on their own railroads. They do not want to make an expenditure, the benefit from which will be enjoyed largely by other railroads.

Railroads now pay a per diem rental of $1.75 for the use of the cars of other railroads. Would it not be of advantage to everyone if this charge were increased to $2.00 for cars equipped with roller bearings? If this did not induce the railroads to equip their own cars, it might be done by an outside organization which could be paid the per diem differential.

ROBERT R. BREWSTER
General Foreman

New and Improved Products of the Manufacturers



Barber Truck-Spring And Stabilizer Unit

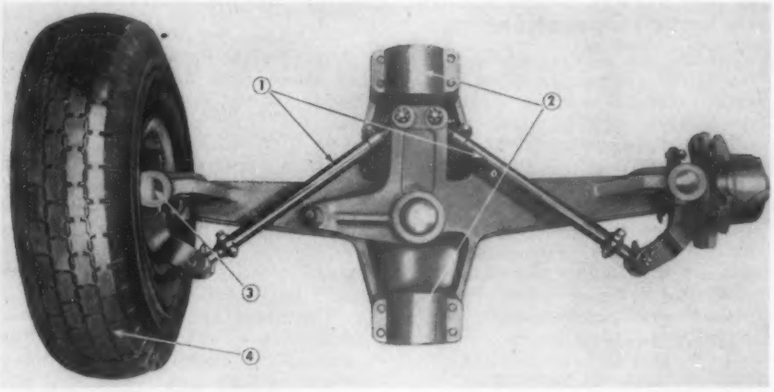
The Standard Car Truck Company, Chicago, has developed a new "Package-Group" spring and stabilizer unit for the trucks of existing freight cars and has placed it on the market after more than a year of successful test service on American and Canadian railroads. The principal objectives sought in the design include adequate strength and wear resistance to assure a number of years of trouble-free service, flexibility enough to avoid excessive wear and breakage under heavy transverse shocks and self-squaring and easy riding even on secondary track at speeds up to 80 m.p.h.

The unit is simple in design, using the increasing downward friction principle of Barber stabilized trucks. It is fairly light in weight for ease of handling, and adaptable to spring-plank and spring-plankless trucks of all 40- and 50-ton types.

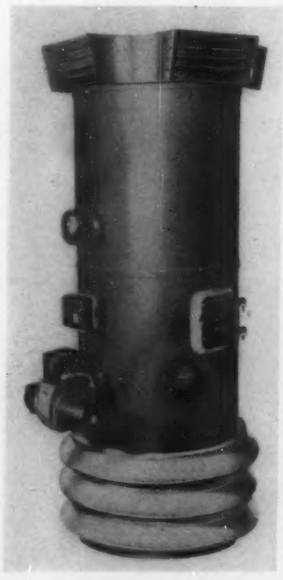
The entire housing and top plate are malleable iron of heavy section at all points of stress. Hardened wear plates are secured to the housing by bolts of ample size, nuts and lock washers.

The alloy friction shoes, designed for long life and high energy absorption, are cup-shaped partially to enclose the actuating alloy springs. They are forced against the wear plates by wedges similar in function to the wedge-shape pockets of Barber stabilized trucks. The load-carrying spring, with 2½-in. deflection and 5¼-in. outside diameter, will fit into spring-plank trucks as well as spring-plankless types, provision being made for the top plates to clear all types of bolsters.

The units are well adapted to give old-type A.A.R. trucks an additional life with improved riding qualities for modern high-speed operation at much less than the cost of new trucks.



The Elliott-type steering axle is a new feature of the 6,000-lb. capacity fork lift truck (Yardlift-60) produced by the Industrial Truck Division of Clark Equipment Company, Battle Creek, Mich. The manufacturer states that (1) Tie rods now are more nearly in line with forces they transmit; (2) torsional rubber bushings replace springs at each pivot point; and (3) Elliott-type design brings the center of the wheel closer to the king pin, thus reducing road shock to the axle. Standard equipment includes (4) pneumatic tires



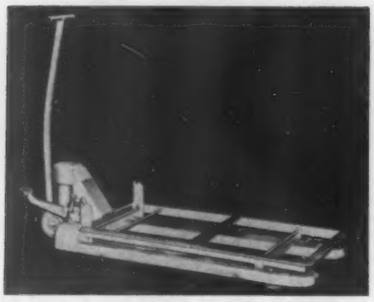
Unit Heater for Shops and Stations

Self-contained, direct-fired heaters for use in roundhouses, diesel repair shops, freight stations, and other railroad structures, have been designed by the Thermobloc division of the Prat-Daniel Corporation.

The unit circulates heated air at working levels under automatic controls and is said to be ideal for maintaining even temperatures in buildings having heavy in and out traffic. The manufacturer states that the units require no complicated or expensive piping, duct work or radiator installations and are available in floor or ceiling suspended models.

Connecting the units with an oil or gas line and electric power places them in readiness to operate and tests indicate that the working area will heat up about five minutes after units are started. Their operation is entirely automatic, requiring no constant supervisory attention.

The heaters are manufactured by the Thermobloc division of Prat-Daniel Corporation, South Norwalk, Conn.



With the use of a "skid adapter," hydraulic platform trucks produced by the Raymond Corporation of Greene, N. Y., can now be used also for handling skids. The adapter consists of a hinged superstructure which according to the manufacturer can be raised out of the way when pallets are to be handled

GENERAL NEWS

C.A.B. Approves Low-Fare Air Coach Operations

Low-fare air coach operations have "conclusively demonstrated" their economic soundness and certificated air lines "should promptly and substantially" expand their coach services, using aircraft with high passenger-carrying capacity, the Civil Aeronautics Board said in a new statement of policy issued December 6.

With presently authorized coach service due to expire next March, the board said it has reached the "firm opinion" that coach operations offer maximum opportunity for air carriers "to provide low fare transportation at a profit level as high as that which can be obtained from standard fare operations using the same aircraft but with fewer seats and free meal service."

The air lines moved promptly to place the new policy into effect. Within a week after the board's statement was issued, two major carriers announced plans for a $99 coast-to-coast air coach fare. Another carrier, National Airlines, said it would file a $43 rate for its air coach service between New York and Miami, Fla.

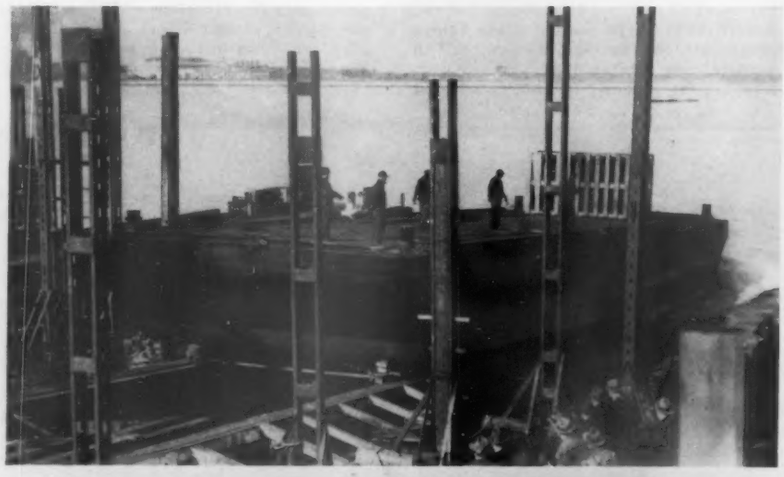
"It is apparent that the maximum development of civil aviation in the United States. . . .will not be realized until such time as air travel is placed within the economic reach of the great majority of the traveling public," the C.A.B. said.

The board admitted its new policy represents a "sharp departure" from existing operations. As a result, the board will continue to study the "impact and effectiveness" of air coach service. Tariffs filed in connection with the low fare policy must carry an expiration date not later than December 31, 1953.

In thus encouraging air lines to increase coach operations the C.A.B. said it would restrict "free meal service," and would impose "minimum density" restrictions for each type of aircraft used. Within these limits the board will encourage proposals for expanding air coach service and reducing fares below the present general minimum of 4½ cents per passenger-mile.

"The substantial cost savings which are possible through the full exploitation of the carrying capacity of the modern four-engine aircraft types make possible substantial reductions in fares for coach services compared with first-class services," the board said. It added that conversion from standard seating arrangements to the more crowded coach-type seating will increase aircraft capacity by as much as 25 per cent.

The board also pointed out that high density coach operations, as contemplated by the new policy, differ from the so-called off-peak operations. The latter utilize standard first-class equipment, but are limited to off-peak hours, generally at night. The board said it believes the fare levels for this service "should not exceed four cents per passenger-mile."



MEMBERS OF THE SPECIAL COMMITTEE of the General Managers Association of New York, whose recommendations led to development of the standard scow described on page 102 of *Railway Age* of December 3. Left to right: F. H. Cogan, superintendent, marine department, Delaware, Lackawanna & Western; C. N. Moore, superintendent, marine department, Lehigh Valley; M. B. Roderick, superintendent, marine department, Erie; J. S. Major, chairman of the committee and superintendent of floating equipment, Baltimore & Ohio; G. H. Massy, superintendent of floating equipment, Central of New Jersey; W. C. Buttron, superintendent of construction and repair, New York Central; and J. E. Benson, superintendent, marine department, New York, New Haven & Hartford. In the upper photograph, the first standardized scow ever constructed on an industry-wide basis slides into the water at the Bethlehem Steel Company's Staten Island yard. The craft was one of three launched at the yard on November 21

Freight Car Supply Still A Problem in Mexico

The National of Mexico has recently reported that its problem of acquiring additional freight cars has not yet been solved. Freight shipments, the road says, continue to increase and new equipment cannot be immediately procured from the United States —although the U. S. National Production Authority has allocated materials for construction of 1,200 cars for Mexico during the first quarter of 1952 (*Railway Age*, December 3, page 100).

Manuel R. Palacios, general manager of the government-owned N. of M., has stated that production of freight cars in the road's own plants is progressing very slowly. It is hoped that production can be stepped up so the number of foreign cars in use — on which the railroad pays $2.15 (approximately 15 pesos Mexican) per car per day — can be reduced. To speed up reparation of cars, shops have been completely modernized with new machinery acquired in the U. S. under the rehabilitation plan approved by the Export-Import Bank.

The N. of M. had received, up to August 30, $38,900,000 for rehabilitation purposes from that source. This amount, made in four loans, has almost all been used, with the road now having at its disposition $1,375,000, U. S. The Mexican railroad had amortized to the same date $10,839,013 and

Car Surpluses and Shortages

Average daily freight car surpluses and shortages for the week ended December 8 were announced by the Association of American Railroads on December 13 as follows:

	Surplus	Shortage
Plain Box	805	1,344
Auto Box	458	115
Total Box	1,263	1,459
Gondola	5	1,323
Hopper	109	1,164
Covered Hopper .	0	0
Stock	2,008	32
Flat	203	171
Refrigerator	4,119	33
Other	68	134
	7,775	4,316

still owed $28,060,987. Other credits, approved but not signed, totaling $79,500,000, will be granted to Mexico, of which the railroad will receive an additional $51,000,000. The balance of the money will go for canal projects and to certain Mexican heavy industries.

H. & M. President Charges "Slowdown" by B. of L. E.

Members of the Brotherhood of Locomotive Engineers working as motormen on the Hudson & Manhattan "have engaged in a slowdown" since December 3 "to force a premature settlement" of the two-year dispute between the railroad and the union on wages and working rules, William Reid, H. & M. president, charged last week. Mr. Reid said "the slowdown has been effected by reducing speed below authorized speeds in tunnels and by hesitating at stations after doors are closed and trains are in all respects ready to leave."

Meanwhile, it was revealed in Washington that J. P. Shields, grand chief of the B.L.E., had mailed advice to members of the organization reminding them of the necessity for "literal observance of all carrier operating and safety rules." This action followed distribution of a circular of similar purport issued by President D. B. Robertson of the Brotherhood of Locomotive Firemen and Enginemen (*Railway Age*, December 10, page 11.)

A.A.R. Says Roads Expect Big December Mail Volume

Railroads expect to handle a record-breaking volume of Christmas mail and parcels during December, the Association of American Railroads said last week.

Post Office estimates indicate 5.7 billion pieces of intercity Christmas mail will be handled this December, the A.A.R. said. This will be a substantial increase over last year and railroads will have to provide more than 3.7 million feet of mail car space to help carry the volume. This space is equivalent to more than 62,000 standard mail cars.

According to present estimates, the A.A.R. continued, railroads will move more than 56 million sacks of mail in December.* They normally handle about 99 per cent of non-local postal business.

The association said that as Christmas mail reaches its peak, rail carriers will supplement all their regular and emergency mail cars with extra cars to keep parcels and letters moving on schedule. It said special mail trains will be used by roads serving more densely populated areas and extra mail cars will be assigned to many passenger trains.

Rogers Will Be I.C.C. Chairman for 1952

Commissioner John L. Rogers has been elected chairman of the Interstate Commerce Commission for 1952. He will succeed Commissioner Walter M. W. Splawn, who will continue as a member of the commission. The chairmanship is rotated among the commissioners on an annual basis.

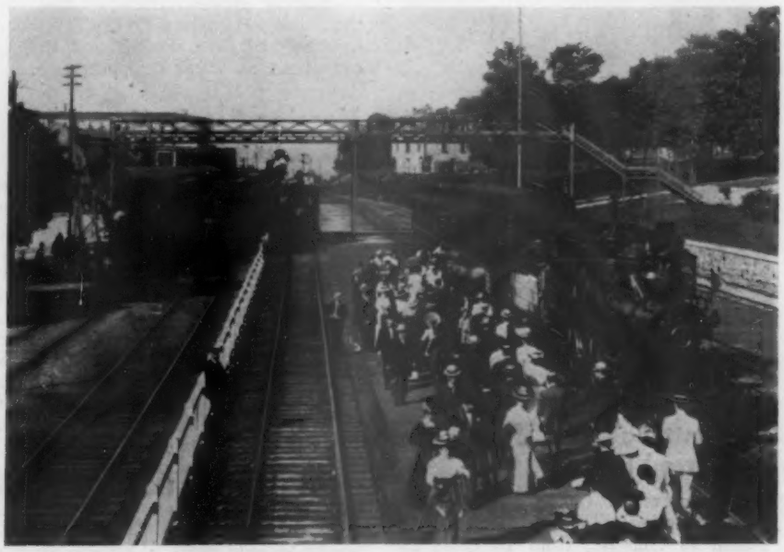
Commissioner Rogers joined the staff of the I.C.C. in 1917. He served as an engineer, examiner, and as director of the Bureau of Motor Carriers prior to his appointment as a member of the commission in 1937. He was reappointed to a new seven-year term as of January 1 this year. Commissioner Rogers served as chairman of the I.C.C. once before, in 1945.

Chevrier Says Seaway Won't Hurt Canadian Railways

Canadian Transport Minister Lionel Chevrier, during debate on legislation to set up the St. Lawrence Authority and ratify the agreement between Canada and Ontario to proceed with the seaway scheme (*Railway Age*, December 10, page 15), told the House of Commons that this project "would not injuriously affect" Canadian railways.

His statement follows:

"I do not think their fortunes will be greatly affected by diversion to the seaway. For one thing, almost half the seaway traffic foreseen is in iron ore, new traffic that now does not move at all. Another large part already uses the water route



HOW TIMES HAVE CHANGED! A photographer of 50 years ago caught this scene at Petosky, Mich. (present population: 6,400), during the height of the summer resort season. It shows —incredible as it may seem today— Petoskey's four-tracked *suburban* station, on the right, and its two-tracked station for main line trains, visible just behind the train at the extreme left. The suburban train on the right is discharging passengers from Harbor Springs and intermediate stations along the north shore of Little Traverse bay. Such trains also departed at very frequent intervals for resort communities to the south, terminating at Walloon Lake, some 10 miles distant. So heavy was the summer suburban traffic that the Grand Rapids & Indiana (now Pennsylvania) provided the Petoskey suburban station with an entirely separate staff, including a train caller who announced arrivals and departures of the ubiquitous locals. Indicative of the activity on these station tracks is the steel pedestrian overpass visible in the background. When hard-surfaced roads opened northern Michigan to the private auto a few years later, this isolated suburban business dwindled, until after World War I it vanished altogether. Today some of the concrete platforms of the local stations may still be seen from the window's of the Pennsylvania's "Northern Arrow" which serves the summer vacationists who still flock to the area

TOGETHER FOR THE FIRST TIME, senior members of the passenger department from Canadian National offices throughout the United States gathered in Chicago recently to discuss the advertising and general passenger sales program for 1952. George L. Bryson, U.S. passenger traffic manager presided. Representatives of the operating and freight departments also participated, as did representatives of the sleeping and dining car department, Canadian National Steamships, Jasper Park Lodge, Minaki Lodge and two advertising agencies

for a good deal of its movement, and either leaves the lakes to move by United States routes or transships to small canalers. Still another substantial part now moves all the way by water in those canalers.

"Such traffic as is lost by the railways will be largely in items now paying rates among the lowest in the schedule, rates that are low in the areas affected because strong competition from vessel service already exists.

"On the other hand, a continued industrial development, further stimulated by the project, may be expected to bring new and high class traffic to the railways, including new traffic in the very areas where diversions may occur. Canada has not stopped growing yet, and the coming decade looks as promising as any in the past. We are going to need not only the seaway but a continued expansion of railway facilities as well."

20-Cent Fare for H.&M. Approved by the I.C.C.

The Interstate Commerce Commission has authorized the Hudson & Manhattan to increase, from 15 cents to 20 cents, its local fares for rides between points in New York City and Jersey City, N. J., and Hoboken.

The order was in the commission's I. & S. Docket No. 5924. The road made the increase effective December 13, after a federal court in Newark, N. J., refused to issue a temporary restraining order sought by Jersey City officials.

Coakley Is D.T.A.'s Director Of Inland Water Transport

John P. Coakley has been appointed director of inland water transportation for the Defense Transport Administration. He succeeded Paul L. Tietjen who has returned to his former position as director of water transportation for the Jones & Laughlin Steel Corp. Mr. Coakley had been serving as a D.T.A. consultant on water transportation.

Hearing Set for Jan. 14 On New Freight-Rate Plea

The railroad petition for further freight-rate increases which would bring the Ex Parte 175 rise up to the full 15 per cent sought in that case has been assigned by the Interstate Commerce Commission for hearing in Washington, D. C., on January 14, 1952. The proceedings will comprise a "further hearing" in Ex Parte 175 and will be conducted by the commission's Division 2, consisting of Commissioners Aitchison, Mahaffie, Splawn, and Alldredge.

This was provided for in a commission order dated December 3 and a notice dated December 7. The former announced, the further hearing would be held, while the latter set the date and indicated the procedures planned. "Upon the further hearing," it said, "all stipulations made, and the evidence already received will be considered as continuing and a part of the record, and need not be reintroduced or duplicated."

The notice also said it was contemplated that verified statements of evidence in chief of the railroads, other petitioners, and parties supporting them, would be filed with the commission and interchanged on or before December 20. The special instructions and rules of procedure adopted for the case last April will apply again.

The increase now proposed would raise present freight rates by about 7.2 per cent. The increase previously authorized in Ex Parte 175 averaged only 6.6 per cent. (*Railway Age* October 29, page 15, and August 20, page 55.)

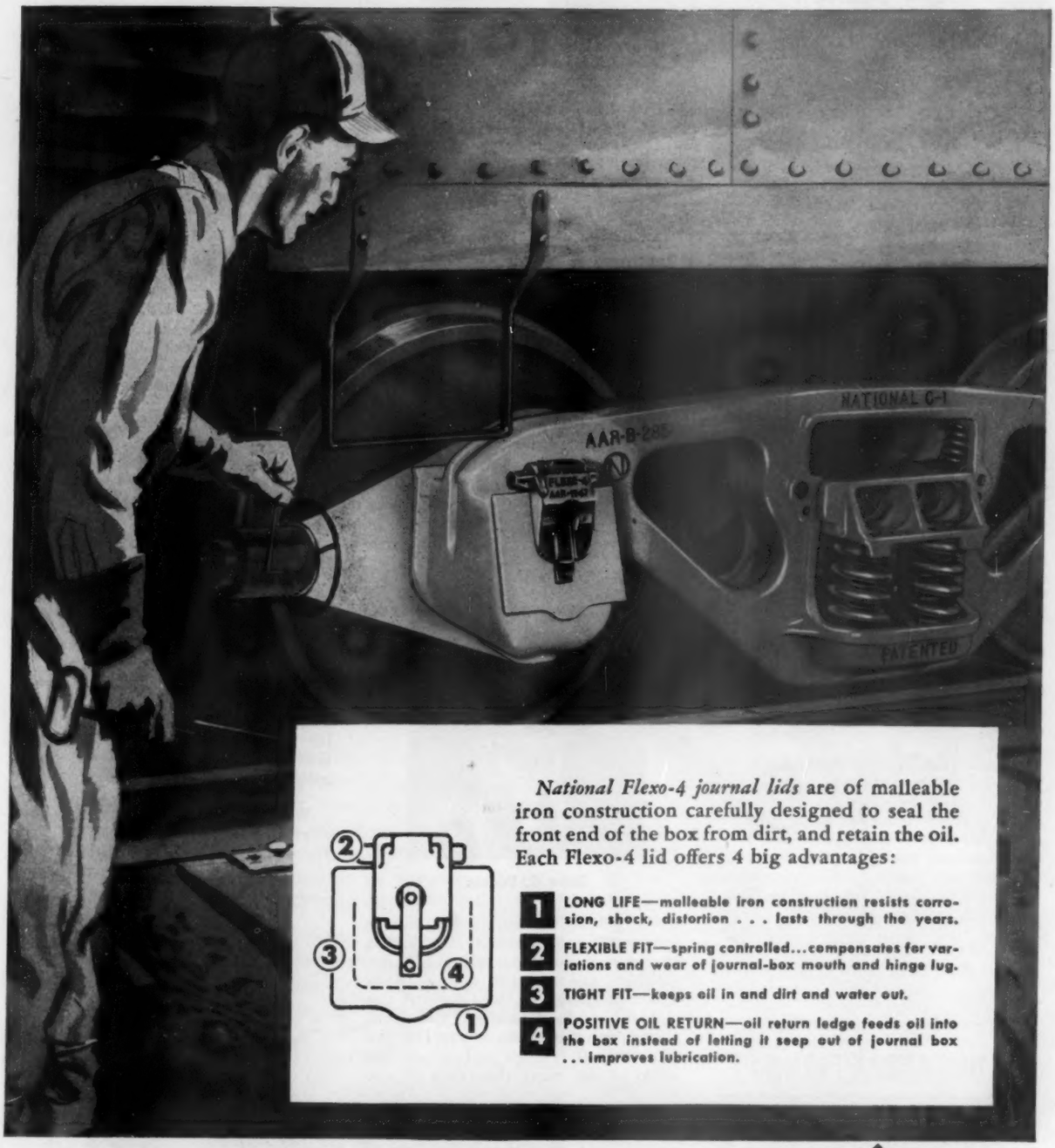
OVERSEAS

British to Try Standard Frequency Electrification

British railways have decided to carry out a trial of the single-phase 50-cycle a.c. system of electric traction. The trial will be carried out on the Lancaster - Morecambe - Heysham Line, which was originally electrified experimentally in 1908 at 6,600 volts, 25 cycles, the equipment of which is now life-expired. By arrangement with the principal electrical manufacturers, various methods and types of equipment are to be tried out, and the overhead line voltage will be varied from the present 6,600 volts up to and including 20,000 volts.

This traction system is being considered for secondary lines, the recommended system for lines carrying heavier traffic being 1,500 volts d.c. overhead. It introduces special problems, but also several advantages, including use of a lighter overhead system, fewer and simpler substations and absence of power cables alongside the track. As a result of recent advances in technical development, it may now have a wider field of economic application.

"Flexo-4's sure slam the lid on hot-box worries!"



National Flexo-4 journal lids are of malleable iron construction carefully designed to seal the front end of the box from dirt, and retain the oil. Each Flexo-4 lid offers 4 big advantages:

1. **LONG LIFE**—malleable iron construction resists corrosion, shock, distortion . . . lasts through the years.
2. **FLEXIBLE FIT**—spring controlled...compensates for variations and wear of journal-box mouth and hinge lug.
3. **TIGHT FIT**—keeps oil in and dirt and water out.
4. **POSITIVE OIL RETURN**—oil return ledge feeds oil into the box instead of letting it seep out of journal box . . . improves lubrication.

FOR ALL NEW CARS AND REPLACEMENTS, SPECIFY NATIONAL FLEXO-4 LIDS.
NATIONAL MALLEABLE AND STEEL CASTINGS COMPANY, CLEVELAND 6, OHIO.
A-3572

NATIONAL MALLEABLE and STEEL CASTINGS COMPANY
COUPLERS • TRUCKS • YOKES • DRAFT GEARS • JOURNAL BOXES AND LIDS

NATIONAL Products FOR TRANSPORTATION AND INDUSTRY
Est. 1868

This experimental electrification will provide experience in the suitability of standard frequency a.c. electrification for conditions in Great Britain.

Chile.—This country's State Railways reportedly plan a five-year procurement program, according to a recent issue of Foreign Commerce Weekly, for the following equipment: 20 Mountain-type 66-in. gage steam locomotives; 25 first-class 66-in. gage steel coaches; 30 third-class 66-in. gage steel coaches; two 66-in gage 2,000-hp. diesel-electric locomotive units; three 66-in. gage combination caboose-dining cars; six first-class 66-in. gage air-conditioned coaches; nine 66-in. gage intermediate coaches for electric-trolley multiple units; three 66-in. gage four-car electric trolley multiple units; one 4,000-kw. 3,000-volt d.c. portable substation; 10 meter-gage diesel-driven rail passenger cars; 12 meter-gage under-floor mounted diesel-driven rail cars; four meter-gage 1,000-hp. diesel-electric or diesel-hydraulic locomotive units; four meter-gage 600-hp. diesel-electric or diesel-hydraulic locomotive units; 10 meter-gage 300-hp. diesel-electric or diesel-hydraulic locomotive units; 2 meter-gage diesel-driven passenger cars, with rack-gear drive for operation at high altitude; 4 passenger cars; as described immediately before; two 66-in. gage 3,000-volt d.c. electric locomotives; assorted machine tools; 500 66-in. gage 30-metric-ton box cars; and 500 66-in. gage gondola cars.

Specifications are available from the Chilean State Railways, Traction and Shops Department, Casilla 2017, Santiago, Chile. Initial orders are reportedly to be placed before the end of 1951.

Thailand.—This country's Railways Administration has invited bids on 100 passenger-train cars, according to a recent issue for Foreign Commerce Weekly. Tender forms and specifications are available from the Stores Division, Railway Administration of Thailand, Yose Bridge, Bangkok, subject to a charge of 500 baht (about 22 baht equal $1 U. S.). Closing date for receipt of bids in Bangkok is December 24, 1951.

ORGANIZATIONS

The **American Society of Traffic and Transportation** will hold winter examinations for certificated membership on January 17 and 18 in as many cities as there are groups of candidates applying for examination. Applicants have been asked to register promptly with the society's registrar, E. H. Breisacher, P.O. Box 2128, Middle City station, Philadelphia 3, Pa. Dr. G. Lloyd Wilson, the society's director of education and head of the transportation department of the University of Pennsylvania, said that at present 80 per cent of applicants taking the society's examinations are passing them.

SUPPLY TRADE

Acme Steel Forms Steel Products Division

Formation and organization of the Acme Steel Products division of the Acme Steel Company, Chicago, has been announced by Carl J. Sharp, president. The new division will operate, beginning January 1, 1952, as an independent sales and distributing company for Acme's steel strapping, tools and accessories, stitching wire and equipment, and other related products, previously sold through the company's internal consumer products division. Sales of strip steel and special products will remain with the parent company, as will all manufacturing and production operations.

In explaining the move, Mr. Sharp said "We believe our major consumer

John G. Bucuss

products have now attained a volume that justifies a separate organization wholly responsible for sales and distribution, and that can devote all its time and energy to the future of this highly specialized business. Our primary objective is to do everything possible to sell, service and satisfy the needs of our many thousands of customers."

President of the new division will be **John G. Bucuss,** former general manager of the strapping division. With the company for 33 years, Mr. Bucuss is also current president of the Materials Handling Institute. Assisting him as vice-president, stitching wire, will be F. Raymond Grove, Sr., former general manager of the stitching division.

Granville M. Fisher, formerly transportation sales representative for the finishes division of **E. I. du Pont de Nemours & Co.** in the New York area, has been promoted to a supervisory position in the division's trade sales section. **J. David Lee,** formerly with the Philadelphia regional office, succeeds Mr. Fisher, with headquarters in New York.

Joseph H. Humberstone has been elected a vice-president of the **Air Reduction Company. Scott D. Baumer** succeeds Mr. Humberstone as president of the Airco Equipment Manufacturing division.

Stockholders of the **Elastic Stop Nut Corporation of America** and the **American Gas Accumulator Company** will hold special meetings early in February 1952, to vote upon a proposed merger of the two companies. After the merger of A.G.A. into Elastic, the former's business would be carried on as a division of Elastic under present A.G.A. management. Each stockholder of A.G.A. would receive 1½ shares of common stock of Elastic for each A.G.A. share. A.G.A.'s holdings of Elastic stock would be cancelled, so that after the merger outstanding stock of Elastic would total approximately 504,814 shares, compared with 458,453 shares presently outstanding.

Dr. Henry C. Rosenberg has joined the research staff of the **Dearborn Chemical Company,** Toronto.

The **General Steel Castings Corporation,** Granite City, Ill., has been appointed sales representative for the Houdaille friction snubber on all applications of the snubber to railroad car trucks of G.S.C. manufacture. This snubber, designed by the **Chrysler Corporation,** is manufactured by the **Houdaille-Hershey Corporation.**

William W. Greenway has been appointed general manager of the Chicago steel tank division of **Pressed**

P. H. Neville, who has been elected president of the Leece-Neville Company. Mr. Neville formerly was vice-president and secretary of the firm

No question about heat ... BARCO

WHEN the temperature drops and blizzards sweep across the country, you can be thankful that you're using BARCO STEAM HEAT CONNECTIONS!

Barco connections are designed *right* and built *right* to meet the most severe service conditions. Ample capacity to handle steam supply on longest trains. Freedom from leakage; pressure-sealed and blowout-proof! Built with light weight all-welded steel to carry up to 300 psi steam, saturated or superheated. Ball joints of specially hardened alloy steel.

It's easy to keep Barco Steam Heat Connections in perfect condition for winter service. Only two joints to maintain per connection. Cuts costs; saves time; simplifies stocking of parts. *Get the facts!* BARCO MANUFACTURING CO., 1800 NN Winnemac Ave., Chicago 40, Illinois. *In Canada:* The Holden Co., Ltd.

Advantages BARCO *Offers*

- LIGHTEST IN WEIGHT
- GREATEST STEAM CAPACITY
- EASIEST TO INSTALL
- CHEAPEST TO MAINTAIN
- ONLY 2 JOINTS INSTEAD OF 4

STEAM HEAT CONNECTIONS

FREE ENTERPRISE—THE CORNERSTONE OF AMERICAN PROSPERITY

Steel Car Company, with headquarters in Chicago. He was formerly manager of the company's Rice & Adams equipment division in Buffalo, N. Y.

James H. W. Conklin has been appointed general sales manager of the Philadelphia division of the **Yale & Towne Manufacturing Co.** to succeed **James P. Kinney,** who is taking over the company's distributorship in Los Angeles and southern

James H. W. Conklin

California. Immediately before his present appointment, Mr. Conklin was with the sales department of the Pangborn Corporation, Hagerstown, Md., and prior to that, he was sales manager of the industrial truck division of the Clark Equipment Company.

Richard W. Koch, formerly assistant to the executive vice-president of the **Dixie Cup Company, Joseph W. Kuebler,** formerly general works manager, and **John B. Taylor,** formerly controller, have all been elected vice-presidents. Mr. Kuebler will be in charge of production and Mr. Taylor will continue his duties as controller

Richard W. Koch

in addition to his new responsibilities.

Mr. Koch was graduated from the University of Wisconsin and immediately after joined the Owens-Illinois Glass Company. He first worked as a detail salesman and later advanced to assistant to sales manager of the beverage division. In 1943 he joined National Distillers where he was appointed executive vice-president and a director of the White Rock Corporation. He joined Dixie Cup in 1949 as assistant to the executive vice-president.

Sherman R. Lyle, sales engineer for the Cleveland district of the **Timken Roller Bearing Company** since 1946, has been appointed district manager of the steel and tube division, northern Pennsylvania and New York State district, with headquarters in Buffalo.

OBITUARY

Albert C. Sensenney, division manager of the railway sales department of the **Lehon Company,** died on November 21 in Chicago. He was 62 years old.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

9,824 Freight Cars Delivered in September

Freight car builders maintained their high level of production in November by delivering 9,824 new freight cars, the American Railway Car Institute and the Association of American Railroads have announced jointly. This is more than 4,000 new cars above November 1950, when production totaled 5,791. Freight car production in October was 10,082.

The Institute and A.A.R. also reported that 6,752 new freight cars were ordered in November, and that the backlog of cars on order on December 1 was 129,158. A breakdown of the cars ordered and delivered in November and of the cars on order on December 1, is given in the accompanying table.

TYPE	Ordered Nov. 1951	Delivered Nov. 1951	On Order & Undelivered Dec. 1, 1951
Box—Plain	1,510	4,308	38,898
Box—Auto	....	15	668
Flat	200	199	3,294
Gondola	3,900	2,250	25,273
Hopper	750	1,436	38,961
Covered Hopper	300	276	5,178
Refrigerator	....	504	5,453
Stock	....	56	937
Tank	68	736	9,067
Caboose	20	16	440
Other	4	28	989
TOTAL	6,752	9,824	129,158
Carbuilders	1,252	6,315	83,466
Railroad Shops	5,500	3,509	45,692

The **Transportation Corps** has requested bids by December 27 on 204 80-ton flat cars for foreign service.

SIGNALING

The **Canadian National** has ordered equipment from the General Railway Signal Company for installation of a relay interlocking at Mimico yard, Toronto. The remote control portion of this interlocking will be equipped with Syncrostep. The near controls will be over unit wire. The control machine will have 54 track lights and 77 levers for control of 39 switch machines and 38 signals. Included in this order are type B plug-in relays, model 5C and 5D switch machines, and type SA searchlight signals.

The Electro-Motive Division of General Motors Corporation has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company 10 sets of three-indication type E coded continuous cab signal equipment to be installed on diesel-electric locomotives being built for the **Union Pacific.**

MARINE

The **Baltimore & Ohio** has ordered four diesel-powered welded steel tugboats from the RTC Shipbuilding Corporation, Camden, N. J., at a cost of $364,750 each. The tugs, for use in New York harbor, will be equipped with 1,600-hp. engines. They will be 110 ft. long, with a 25½-ft. beam and a 13-ft. draft. Delivery is scheduled for January 15, March 1, April 15 and June 1, all in 1953.

IRON & STEEL

The **Lehigh & New England** has ordered 2,537 gross tons of rail from the Bethlehem Steel Company.

The **Lehigh Valley** has ordered 2,500 tons of rail from the Bethlehem Steel Company.

FINANCIAL

New Securities

Division 4 of the I.C.C. has **authorized:**

ERIE.—To assume liability for $5,400,000 of equipment trust certificates, to finance in part 22 diesel-electric locomotives and 500 gondola cars, costing an estimated $6,915,000 (*Railway Age*, November 12, page 62). Division 4's report approved sale of the certificates to Salomon Bros. & Hutzler and three associates. Winning bid for the issue was 99.531, with interest at 3 per cent. On these bases the average annual cost of the proceeds to the Erie will be approximately 3.1 per cent. The certificates, dated December 1, will mature in 20 semiannual installments of $270,000 each, beginning June 1, 1952. The certificates were reoffered to the public at prices yielding 2.2 to 3.15 per cent, according to maturity.

LEHIGH & NEW ENGLAND.—To assume liability for $1,875,000 of series M equipment trust certificates, to finance in part 500 new hopper cars costing an estimated $2,365,505 (*Railway Age*, October 22, page 62). Division 4 approved sale of the certificates to Halsey, Stuart & Co. and four associates. Winning bid for the issue was 99.566, with interest at 3⅛ per cent. On these bases the average annual cost of the pro-

WHERE WHEEL RESEARCH SETS A RECORD PACE TOO

While Armco Wrought Steel Wheels are being turned out in record numbers, Armco wheel-research too is at an all-time high.

Why so much research when Armco is hard-pressed to keep up with the demand for Wrought Steel Wheels?

The reason is that Armco Technicians in laboratories and plants are keeping pace with requirements of modern high speed trains and Diesel locomotives for better, sturdier, safer wrought steel wheels.

This "engineer" in the Armco Research Laboratories is braking a wrought steel car wheel from 120 mph to stop in 15 seconds, with 20,000 pounds of pressure on each brake shoe.

Here a research technician gives an Armco Wrought Steel car wheel a final hardness test.

Chemical composition tests are made in laboratories like these to make sure steel for Armco Wrought Steel Wheels contains just the right amount of carbon.

ARMCO STEEL CORPORATION

4021 Curtis Street, Middletown, Ohio • Plants and Sales Offices from Coast to Coast • Export: The Armco International Corporation.

ceds to the L&N.E. will be approximately 3.22 per cent. The certificates, dated December 1, will mature in 15 annual installments of $125,000 each, beginning December 1, 1952. The certificates were reoffered to the public at prices yielding from 2.25 to 3.25 per cent, according to maturity.

NEW YORK CENTRAL.—To assume liability for $8,100,000 of equipment trust certificates, to finance in part 22 diesel-electric locomotives and 1,000 gondola cars, costing an estimated $10,844,920 (*Railway Age*, November 12, page 62). Division 4 approved sale of the certificates for 99.528 with interest at 3⅜ per cent—the bid of Salomon Bros. & Hutzler and three associates—which will make the average annual cost of the proceeds approximately 3.48 per cent. The certificates, dated December 1, will mature in 15 annual installments of $540,000 each, beginning December 1, 1952. The certificates were reoffered to the public at prices yielding from 2.5 to 3.5 per cent, according to maturity.

ST. LOUIS-SAN FRANCISCO.—To assume liability for $4,725,000 of series J equipment trust certificates to finance in part 37 diesel-electric locomotives and 100 steel woodrack cars. The diesel-electrics include ten 1,200-hp. switching locomotives, fourteen 1,500-hp. road-switching locomotives, and thirteen 1,500-hp. road-switching locomotives equipped with steam generators. Estimated total cost of the equipment is $5,920,843.

Division 4's report approved sale of the certificates at 99.269 with interest at 3½ per cent —the bid of Halsey, Stuart & Co. and ten associates—which will make the average annual cost of the proceeds to the road approximately 3.26 per cent. The certificates, to be dated December 15, will mature in 15 annual installments of $315,000 each, beginning December 15, 1952. The certificates were reoffered to the public at prices yielding from 2.3 to 3.25 per cent, according to maturity.

Dividends Declared

ALLEGHENY & WESTERN.—$3, payable January 2, 1952 to holders of record December 20.

MAINE CENTRAL.—6% prior preferred, $1.50, quarterly, payable January 2, 1952 to holders of record December 27.

NEW YORK, NEW HAVEN & HARTFORD.—5% series A preferred, $5, accumulated, payable December 27 to holders of record December 17.

PATERSON & HUDSON RIVER.—$1.25, semi-annual, payable January 11 to holders of record December 28.

Security Price Averages

	Dec. 11	Prev. Week	Last Year
Average price of 20 representative railway stocks	54.84	54.12	52.12
Average price of 20 representative railway bonds	90.14	90.44	96.92

RAILWAY OFFICERS

EXECUTIVE

J. M. Symes Made P.R.R. Executive Vice-President

Appointment of James M. Symes as executive vice-president of the Pennsylvania was announced on December 12 by Walter S. Franklin, president of the road. Mr. Symes has been vice-president—operation since 1947. As executive vice-president he will assist the president in general supervision and administration of P.R.R. affairs.

Mr. Franklin also announced that James P. Newell, now assistant vice-president—operation, will succeed Mr. Symes as vice-president — operation and that Walter W. Patchell is appointed vice-president—real estate and taxation, succeeding Richard C. Morse, who is retiring after 43 years of railroad service. The appointments are effective January 1, 1952.

Also announced was the retirement on that date of George H. Pabst, Jr. as vice-president—assistant to president. Mr. Pabst had been vice-president— finance until appointed to his present post last May, when he completed 45 years of work with the railroad.

Born in Glen Osborne, Pa., near Pittsburgh, son of a Pennsylvania baggage master, Mr. Symes, after attendance at the Carnegie Institute of Technology, joined the Pennsylvania at Pittsburgh in May 1916. At 56, he has been a freight movement director, superintendent of passenger transportation, chief of freight transportation, general manager, regional vice-president and vice-president — operation.

James M. Symes

He was vice-president — operations and maintenance for the Association of American Railroads in Washington from October 1935 to February 1939. Rapid advancement in the Pennsylvania's operating department brought Mr. Symes to the post of general manager of the road's Western region at Chicago following his Washington service, and to the vice-presidency at Chicago in February 1942. He was appointed vice-president — operation at Philadelphia five years later and in April 1947 was elected a director of the company.

OPERATING

W. St. John, trainmaster of the GULF, MOBILE & OHIO at Tuscaloosa, Ala., has been appointed superintendent, Southern division, at Meridian, Miss. He is succeeded by **William F. Selph,** trainmaster of the Louisiana division at New Orleans. **J. M. Doolittle** has been appointed trainmaster at New Orleans. Mr. St. John succeeds the late **L. C. Spencer.**

R. V. Wade, assistant trainmaster of the CHESAPEAKE & OHIO, has been appointed terminal trainmaster, with headquarters as before at Clifton Forge, Va., succeeding the late **L. C. Cagle.**

TRAFFIC

Oswald A. Trudeau, assistant general traffic manager of the CANADIAN NATIONAL, has been appointed passenger traffic manager, with headquarters as before at Montreal, succeeding **Albert A. Gardiner,** who will retire on pension on December 23. **Arthur P. Lait** and **Fay N. McKenzie,** general passenger agents at New York and Winnipeg, respectively,

Oswald A. Trudeau

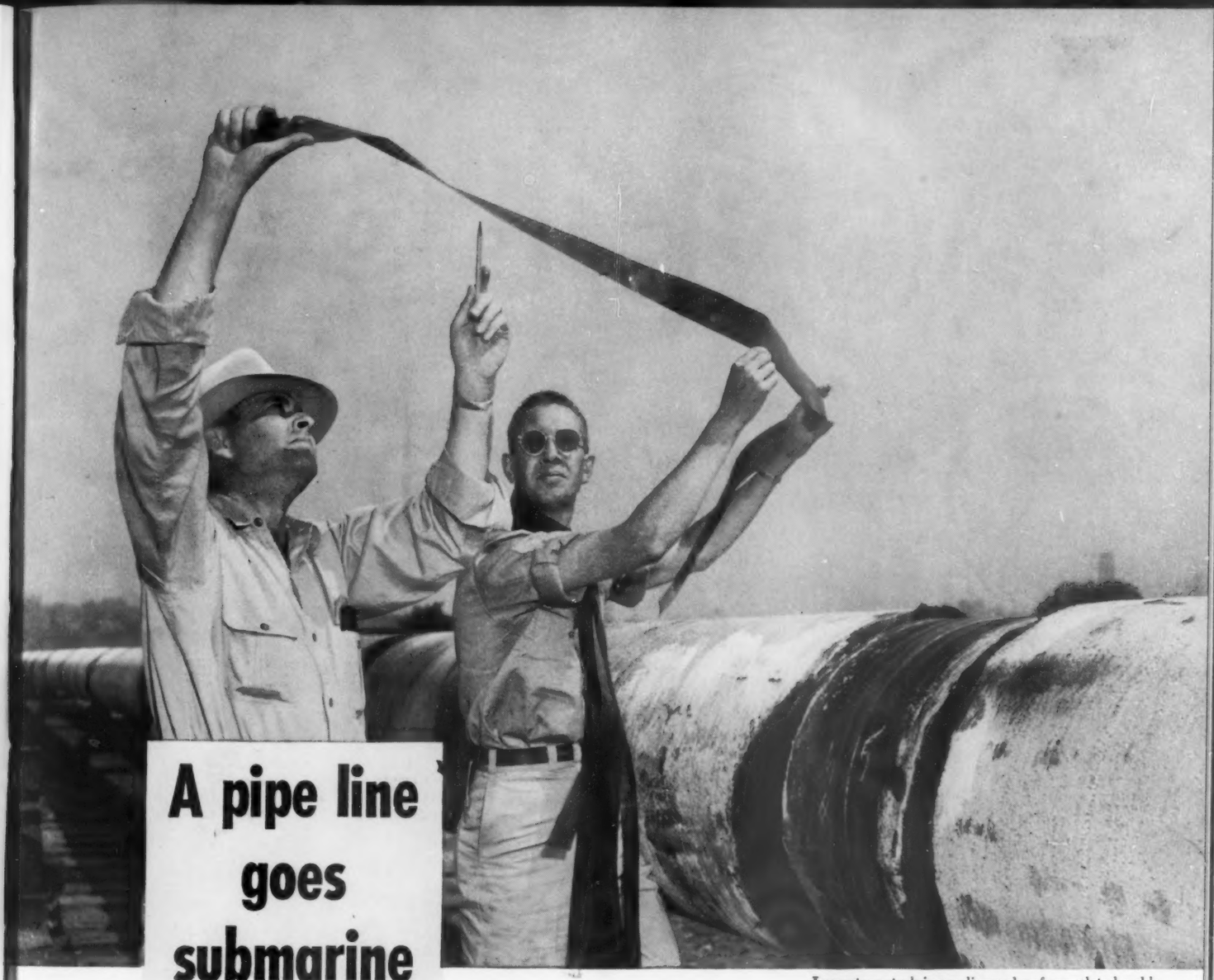
have been promoted to passenger traffic managers at Montreal. **Joseph N. Vincent,** assistant to general passenger traffic manager, has been named assistant passenger traffic manager at Montreal.

Mr. Trudeau was born at Waterloo, Que., and attended St. Bernardin College and Waterloo Academy. He entered railroad service in February 1906 as a clerk in the office of the auditor of passenger accounts, Grand

Albert A. Gardiner

Trunk (now C.N.), and subsequently served as advertising clerk, excursion clerk, chief clerk of passenger department at Montreal and special representative in charge of large movements. Mr. Trudeau was appointed district passenger agent at Montreal in March 1935, general passenger agent in October 1942, assistant passenger traffic manager in 1947, and

(Continued on page 80)



Inspectors studying radiographs of completed welds in the 26-inch-diameter, 1⅛-inch-thick steel pipe.

A pipe line goes submarine and Radiography proves each weld

NATURAL GAS from Texas makes its final plunge into New York City through a 4800-foot pipe line laid under the bed of the Hudson River. Each joint was welded. And with 450 lbs. p.s.i. inside and the pressure of silt and 90 feet of water outside, these welds had to be sound and set for a long life. To make sure, the contractor had radiographs made of every joint.

This is how Radiography helps do important jobs well. It puts a valuable O. K. on welds. It helps build reputations for consistently good work.

Wouldn't you like to know how it is helping to increase business and improve production for others? Your x-ray dealer will be glad to tell you. Get in touch with him.

EASTMAN KODAK COMPANY
X-ray Division • Rochester 4, N. Y.

Radiography...

another important function of photography

Kodak
TRADE-MARK

You get more than a "New Part" Guarantee

When you use Electro-Motive's factory-rebuilding service, you get more than a full guarantee of new-part performance.

You are assured that every design improvement made in the assembly since it was built is incorporated during the rebuilding process.

Remanufacture of an engine crankcase built prior to 1940, for example, involves as many as 12 separate modifications and improvements which are included in current design and in all Electro-Motive rebuilds.

This "up-dating" of old equipment is one of many reasons why it pays to send traction motors, generators, engines, injectors and other components to Electro-Motive for rebuilding.

Production-type methods with modern tooling and techniques—plus efficiencies made possible by high volume—assure top quality at lowest cost.

Your nearest Electro-Motive Branch maintains a stock of factory-rebuilt engines, traction motors, generators and other major components available for immediate shipment on Unit Exchange Service —assemblies that incorporate the latest advances in design and technology.

If you'd like further information about Electro-Motive's Unit Exchange Service, write us or consult our representative. It will save you money—and cut out-of-service time.

What we mean by "unit exchange"

There are two ways in which components may be sent to Electro-Motive for rebuilding. "Rebuild and Return" involves the rebuild and return of the customer's own property. "Unit Exchange" means the immediate delivery of a previously rebuilt and fully guaranteed component inexchange for one needing rebuilding sent in by the customer. You pay only for the work needed to bring the assembly to top-quality standards at Electro-Motive's low flat-rate charge.

ELECTRO-MOTIVE DIVISION

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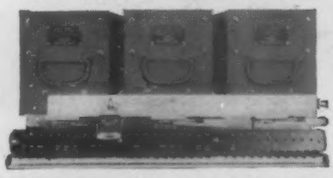
COMPLETE ADAPTABILITY

Bendix Experience*

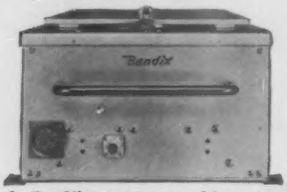
GIVES IT TO YOU WITH

Exclusive Clear Channel Construction!

THE COMMAND-AIR SERIES



The MRT-8 Railmaster has individual cases for transmitter, receiver, and power supply. Each may be removed from shock mount independently.



The MRT-6 Trafficmaster combines transmitter, receiver and power supply in a single housing. It is electrically identical to the MRT-8. (Directly interchangeable with the MRT-5)

Over the many years that Bendix has been the leading builder of Railroad Radio, they've learned that adaptability—*complete* adaptability—to any type of installation is of prime importance. In developing Exclusive Clear Channel Construction, Bendix engineers gave first consideration to your installation requirements. As a result, you can locate the unit almost anywhere you want it—under the seat . . . on the wall . . . or in the nose of a diesel. Clear Channel Construction also gives you a radio that is flexible enough to fit every possible climatic and terrain condition. Every component is rated to operate at −40° C to +70° C . . . and the set itself is built to take the toughest shocks, vibration and punishment you can give it. That's not all, Clear Channel Construction also means that interference is automatically cut out by a special electronic circuit . . . I.F. stages are factory-tuned and sealed to stay in alignment . . . selectivity, sensitivity and watt output for current input, *are better than any other railroad radio.* Write today and get the full facts on how Bendix* Radio Clear Channel Construction can fit your job—no matter what it is!

*REG. U.S. PAT. OFF.

* *Bendix radio has met and mastered more radio problems for more railroads than any organization in the field.*

Bendix most trusted name in **Radio**

Bendix AVIATION CORPORATION

BENDIX RADIO DIVISION
BALTIMORE, MARYLAND

Export Sales: Bendix International Division, 72 Fifth Avenue, New York 11, New York
Canadian Distributor: Radio Engineering Products, Ltd., 4305 Iberville Street, Montreal, Quebec

WHEREVER YOU USE WOOD..

IN THE NORTH, poles must resist the tremendous weight of frequent sleet storms. Avoid preservatives which *weaken* the wood. BARRETT* Coal-Tar Creosote allows poles to retain their maximum strength, and helps to keep the poles at their best and hold the lines aloft.

IN THE DESERT, crossties broom, shatter and split from extreme dryness and heat. Solutions made with BARRETT Coal-Tar Creosote retard this, and also reduce mechanical wear of crossties through their lubricating action on the wood fibers. In poles, heavy treatment with BARRETT Coal-Tar Creosote substantially reduces checking and splitting.

IN THE SOUTH, prolonged high temperatures cause light-bodied preservatives to leach and evaporate from the wood, thus exposing the wood to termite attack and decay. BARRETT Coal-Tar Creosote, heavier bodied and of lower volatility, prevents this condition. It stays in the wood longer under all conditions—doesn't "run out" on the job.

IN THE SWAMPS, forces of decay are almost at their maximum of destructive power. High moisture content and infection from other decaying wood and debris are ever-present menaces. Poles properly treated with BARRETT Coal-Tar Creosote have survived under swamp conditions for years.

IN FRESH WATER, many preservatives leach out of wood. BARRETT Coal-Tar Creosote resists this leaching action. Being only negligibly soluble in water, it is the preferred preservative for use on submerged wood structures, or those exposed to the powerful action of rapidly flowing water.

IN SALT WATER, marine wood-borers give a preservative its severest test. Of hundreds of preservatives that have been tried through the years, *Coal-Tar* Creosote is the only one that has proved consistently effective against teredos, limnoria and other salt-water enemies of wood.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

Use Barrett* →

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Only coal-tar creosote wood preservative has been used long enough and widely enough to have proved its effectiveness under all conditions.

COAL TAR CREOSOTE

ANOTHER FINE PRODUCT IN EDISON'S COMPLETE LINE...!

Imagine "phoning" your written work!

—and Edison Televoice costs as little as 9¢ per desk per day!

- ONE RECORDER SERVES ONE TO DOZENS OF DESKS!
- EASY AS TELEPHONING!
- TURNS THOUGHTS INTO INSTANT ACTIONS!
- NO DISCS, SLIPS, BELTS TO MANIPULATE!
- "DELIVERS" DICTATION RIGHT TO SECRETARY!
- PERFECTED, PROVED AND PATENTED BY EDISON!

Believe it or not, that's a dictating instrument the man above is using—the sensational new EDISON TELEVOICEWRITER! Here's a design for you—like the telephone you've used for years—that *invites* use. You simply *phone* your written work, without delay or effort, directly to the recorder at the *secretary's* desk. You enjoy free-line service with Edison-engineered circuits scientifically matched to your work-load demand. Work flows out, productivity is boosted, for staffs large or small. Televoice cuts instrument dictation costs as much as 66⅔%! Rent it or buy it—but *try* it! See what wonders it can work for you—now!

Edison TeleVoicewriter

The Televoice System

EDISON, 29 Lakeside Ave., W. Orange, N. J.

Okay—send me A LINE ON TELEVOICE

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COMPANY_____

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GET THE WHOLE STORY—NOW! Send for this new descriptive booklet. Or, to arrange a demonstration, call "EDIPHONE" in your city. In Canada: Thomas A. Edison of Canada, Ltd., Toronto 1, Ontario.

Thomas A Edison INCORPORATED

(*Continued from page* 74)

assistant general passenger traffic manager in June 1950.

Mr. Gardiner was born in Somersetshire, England, on December 22, 1886, and entered railroad service in 1907 as a clerk with the Grand Trunk. He later served the C.N. as chief clerk in the passenger department, chief clerk in passenger traffic manager's office and the office of executive assistant to vice-president. Mr. Gardiner was appointed general passenger agent in 1926, assistant general passenger traffic manager in 1930; general passenger traffic manager in 1944.

Arthur P. Lait

Mr. Lait joined the C.N. at Winnipeg in 1912 and has served in the passenger department in the United States since 1925. He was with the Canadian Expeditionary Forces in World War I and during World War II was in charge of the C.N. office at Washington, D. C.

Fay N. McKenzie

Mr. McKenzie has been with the C.N. passenger department in various positions since 1917.

K. N. Hagen has been appointed traffic manager of the MASON CITY & CLEAR LAKE at Mason City, Iowa, succeeding **Fred E. Wells**, who retired on December 1, after 60 years of railroad service, 37 of which had

Wishes You
all the joys of Christmas
and a peaceful 1952

GRIFFIN WHEEL COMPANY · CHILLED CAR WHEELS

THE WORLD'S LARGEST MANUFACTURER OF CHILLED CAR WHEELS

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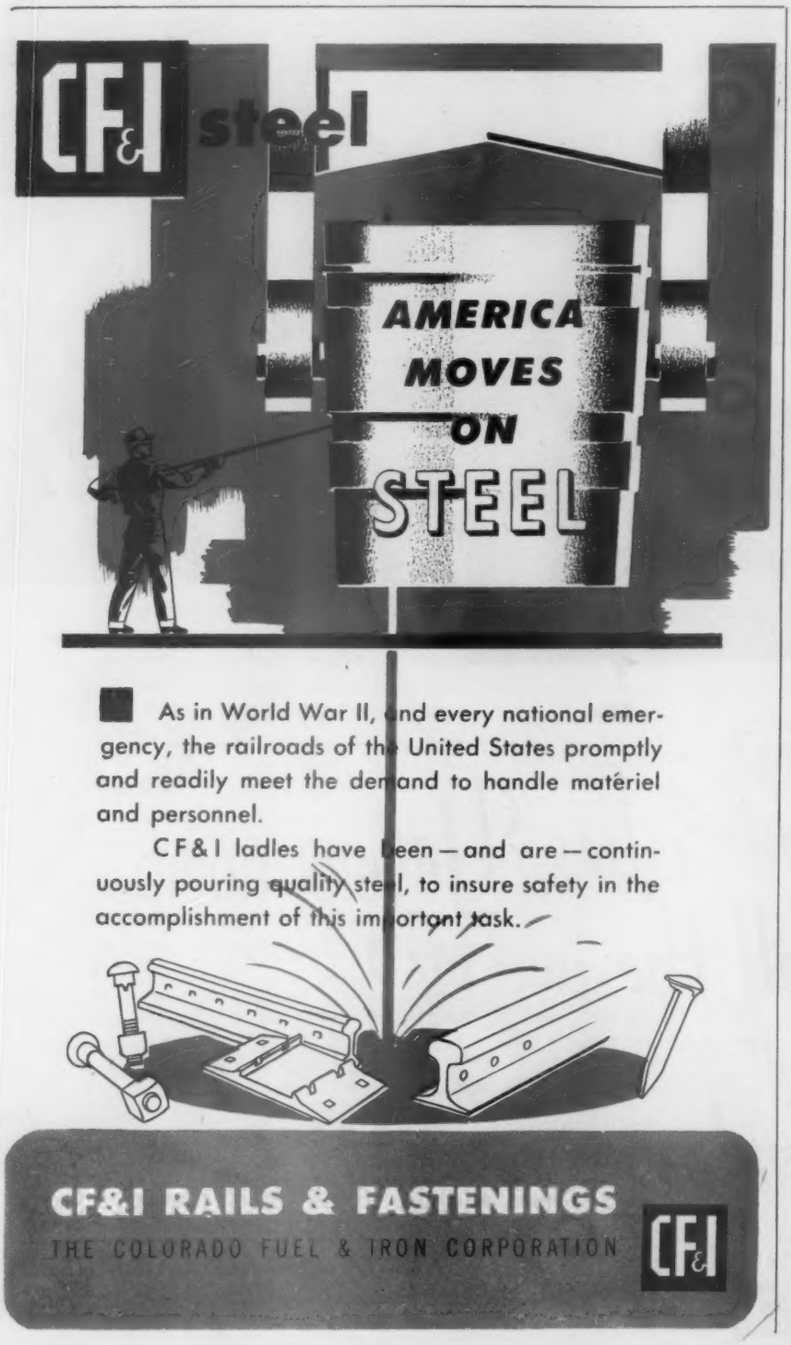
been spent with M.C.&C.L. Mr. Hagen resigned as manager, traffic department, Mason City Chamber of Commerce to take over his new position.

R. J. Strecker, city freight agent of the GREAT NORTHERN at Minneapolis, has been appointed assistant to freight traffic manager, rates and divisions, at St. Paul.

C. E. Libbey has been appointed assistant passenger traffic manager of the SOUTHERN at Atlanta, succeeding **Emory S. Clemens,** whose promotion to passenger traffic manager at Atlanta was reported in the *Railway Age* of November 26.

Mr. Libbey was born at Washington, D. C., on January 17, 1900, and entered the service of the Southern in 1916 as a clerk there. In December 1928 he became rate clerk at Atlanta, serving later as chief rate clerk, chief clerk to assistant passenger traffic manager and to passenger traffic manager. He was promoted to assistant to general passenger agent in March 1948 and in July 1949 became assistant general passenger agent, which position he held at the time of his recent appointment.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AMERICA MOVES ON STEEL
As in World War II, and every national emergency, the railroads of the United States promptly and readily meet the demand to handle matériel and personnel.
CF&I ladies have been — and are — continuously pouring quality steel, to insure safety in the accomplishment of this important task.
CF&I RAILS & FASTENINGS
THE COLORADO FUEL & IRON CORPORATION
CF&I

H. H. Olmsted, commercial agent of the CHICAGO & EASTERN ILLINOIS, has been promoted to general agent, with headquarters as before at Toronto, Ont., a newly-created position.

MECHANICAL

Clarence C. Larson, general car foreman of the ELGIN, JOLIET & EASTERN, has been appointed assistant superintendent of car department at Gary, Ind., succeeding **Victor Small,** appointed superintendent of the car department. **Henry G. Hielscher,** chief car inspector, has been appointed general car foreman at Gary, succeeding Mr. Larson.

Henry A. M. Whyte, foreman of the wheel shop of the GREAT NORTHERN at St. Paul has been appointed superintendent of shops at Superior, Wis., succeeding **S. R. Hyett,** who died November 14.

PURCHASES & STORES

G. V. Ireland has been appointed general storekeeper of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Milwaukee, succeeding **D. H. Phebus,** retired. Mr. Ireland entered Milwaukee service in Miles City, Mont., in 1919. In 1929 he was transferred to Milwaukee as blacksmith foreman, and subsequently was general foreman of the forge and fabrication shops until March, 1951, when he was appointed assistant general storekeeper.

Mr. Phebus started with the railroad in Milwaukee in its stores department in 1920. Subsequently he was in the stores department in Miles City, Mobridge, S. D., and Savanna, Ill. He was appointed assistant general storekeeper in 1943; inspector of stores in 1946, and general storekeeper in 1949.

ENGINEERING AND SIGNALING

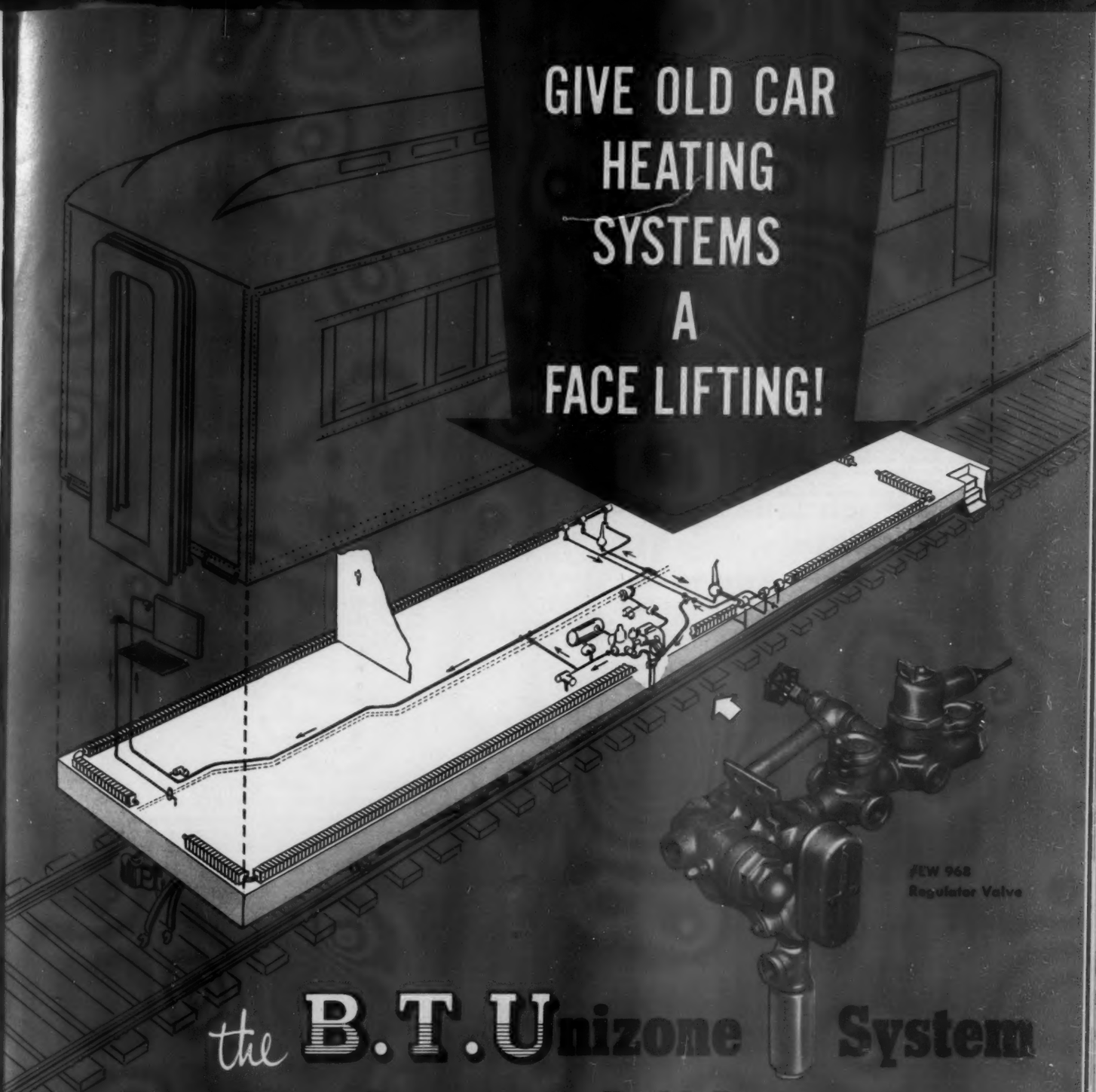
E. C. B. Macnabb, assistant district engineer, British Columbia district of the CANADIAN PACIFIC, has been appointed district engineer, Saskatchewan district, with headquarters at Moose Jaw, Sask. **K. A. Truman,** special engineer, Alberta district, has been appointed district engineer, succeeding **H. R. Younger,** retired. Mr. Truman's headquarters remain at Calgary.

W. G. Dyer, district engineer of the CANADIAN PACIFIC, at Vancouver, B. C., has been appointed engineer maintenance of way, Prairie and Pacific regions, at Winnipeg. He succeeds **T. E. Price,** retired.

A. H. Fox, assistant superintendent of telegraph of the GREAT NORTHERN, has been appointed superintendent of telegraph, with head-

(*Continued on page* 86)

GIVE OLD CAR HEATING SYSTEMS A FACE LIFTING!



#EW 968
Regulator Valve

the B.T.Unizone System

Attract Passengers... Build Revenue

Plug-in
Type Thermostat

Yes . . . you can modernize with "B. T. Unizone" system of radiation and you can do it quickly and easily! Vapor's "B. T. Unizone" system reduces the need for undercar piping to less than any system now in use.

The "B. T. Unizone" regulator valve #EW 968 is designed to reduce the pressure of steam taken from the train line and to maintain a constant supply of steam in the loop, also provide low pressure steam and supply hot water needs. The "B. T. Unizone" plug-in type thermostat provides thermostatic temperature controls and because of its plug-in feature can be easily inspected or replaced. When maintenance is necessary it takes only minutes to remove 4 unions from this simplest of piping systems, to inspect or replace the Unizone regulator valve. Get the facts. Send for Bulletin #562 . . . the Vaporway to build passenger revenue and good will. These two simple parts alone make up the entire operating equipment for coach or open body car temperature and steam pressure control, and heat the wash water also.

Vapor Heating Corporation 80 EAST JACKSON BOULEVARD, CHICAGO 4, ILLINOIS

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OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF SEPTEMBER 1951 AND 1950

Item	United States		Eastern District		Southern District		Western District	
	1951	1950	1951	1950	1951	1950	1951	1950
Miles of road operated at close of month	225,887	226,285	53,255	53,334	45,945	46,037	126,687	126,914
Revenues:								
Freight	$716,394,279	$725,013,590	$260,398,153	$260,423,864	$148,330,297	$140,686,767	$307,665,829	$323,902,959
Passenger	74,092,196	71,622,953	38,420,248	37,311,233	10,574,702	10,058,627	25,097,246	24,253,093
Mail	20,447,384	29,536,460	8,100,804	7,238,015	3,262,092	3,562,219	9,084,488	18,736,226
Express	6,187,963	7,993,787	1,931,252	2,996,191	955,426	1,31e,784	3,301,285	3,680,812
All other operating revenues	38,807,166	37,865,442	16,985,356	17,903,487	6,286,532	5,495,560	15,535,278	14,466,395
Railway operating revenues	855,928,988	872,032,232	325,835,813	325,872,790	169,409,049	161,119,957	360,684,126	385,039,485
Expenses:								
Maintenance of way and structures	122,176,504	112,114,861	45,769,038	41,815,008	23,409,283	22,104,375	52,998,183	48,195,478
Depreciation	11,242,684	11,701,601	4,641,367	5,333,179	2,081,254	1,974,336	4,520,063	4,394,086
Retirements	2,610,183	1,542,300	523,240	689,439	1,105,797	349,133	981,146	503,728
Deferred maintenance	*160,617	*289,223	*69,230	*225,283	*91,387	*1,950	.....	*61,990
Amortization of defense projects	*66,111	151,086	88,933	15,840	37,705	45,959	*192,749	89,287
Equalization	*1,029,687	*378,249	79,251	*1,652,223	*1,294,828	527,536	185,890	746,438
All other	109,580,052	99,387,346	40,505,477	37,654,056	21,570,742	19,209,361	47,503,833	42,523,929
Maintenance of equipment	162,051,560	144,988,982	68,083,596	62,713,862	32,923,386	27,652,209	61,044,578	54,622,911
Depreciation	29,658,269	25,165,727	11,234,455	9,366,945	5,680,680	5,583,074	12,743,134	10,215,708
Retirements	*40,116	*76,180	*20,080	*12,353	6,143	*13,690	*26,179	*50,137
Deferred maintenance and major repairs	*642,817	*181,923	*590,611	*74,865	*1,897	*10,276	*50,309	*96,782
Amortization of defense projects	4,452,124	1,217,320	2,959,994	451,399	2,072,389	233,929	*580,259	531,992
Equalization	480,323	1,111,269	*93,578	*30,420	*166,257	557,643	740,158	584,046
All other	128,143,777	117,752,769	54,593,416	53,013,156	25,332,328	21,301,529	48,218,033	43,438,084
Traffic	17,440,960	15,548,374	5,892,615	5,291,424	3,686,136	3,149,456	7,862,209	7,107,494
Transportation—Rail line	323,770,719	296,418,603	135,452,173	125,291,066	56,283,360	51,670,457	132,035,186	119,457,080
Miscellaneous operations	10,468,298	9,533,832	3,576,233	3,251,982	1,454,280	1,340,899	5,437,785	4,940,951
General	24,499,708	22,067,452	9,539,400	8,621,642	5,194,435	4,734,645	9,765,873	8,711,165
Railway operating expenses	660,407,749	600,672,104	268,313,055	246,984,984	122,950,880	110,652,041	269,143,814	243,035,079
Net revenue from railway operations	195,521,239	271,360,128	57,522,758	78,887,806	46,458,169	50,467,916	91,540,312	142,004,406
Railway tax accruals	105,667,570	132,850,141	30,199,942	37,034,753	29,458,518	29,629,330	46,009,110	66,186,058
Pay-roll taxes	23,532,353	22,588,738	9,624,698	9,347,201	4,427,639	4,164,778	9,480,016	9,076,759
Federal income taxes†	52,551,477	81,420,422	10,018,924	17,711,984	18,675,950	19,284,043	23,856,603	44,424,395
All other taxes	29,583,740	28,840,981	10,556,320	9,975,568	6,354,929	6,180,509	12,672,491	12,684,904
Railway operating income	89,853,669	138,509,987	27,322,816	41,853,053	16,999,651	20,838,586	45,531,202	75,818,348
Equipment rents—Dr. balance	10,547,179	12,318,465	4,865 865	6,336,167	*1,557,196	*2,593,522	7,238,510	8,575,820
Joint facility rent—Dr. balance	3,581,851	3,235,979	1,773,836	1,511,001	438.319	441,490	1,369,696	1,283,488
Net railway operating income	75,724,639	122,955,543	20,683,115	34,005,885	18,118,528	22,990,618	36,922,996	65,959,040
Ratio of expenses to revenues (percent)	77.2	68.9	82.3	75.8	72.6	68.7	74.6	63.1

FOR THE NINTH MONTHS ENDED WITH SEPTEMBER 1951 AND 1950

Item	United States		Eastern District		Southern District		Western District	
	1951	1950	1951	1950	1951	1950	1951	1950
Miles of road operated at close of month	225,948	226,480	53,280	53,354	45,953	46,112	126,715	127,014
Revenues:								
Freight	$6,385,387,136	$5,648,474,104	$2,353,842,881	$2,098,846,036	$1,340,115,969	$1,157,708,410	$2,691,428,286	$2,391,919,658
Passenger	669,148,021	601,990,764	338,683,264	317,446,234	105,889,896	90,917,403	224,574,861	193,627,127
Mail	179,020,086	171,548,148	70,096,608	59,186,224	29,260,242	28,405,261	79,663,236	83,956,663
Express	56,876,479	55,734,162	18,280,665	16,989,629	9,584,056	9,601,298	29,011,758	29,143,235
All other operating revenues	328,130,031	279,949,172	147,216,602	124,497,377	56,336,373	46,062,351	124,577,056	199,389,444
Railway operating revenues	7,618,561,753	6,757,696,350	2,928,120,020	2,616,965,500	1,541,186,536	1,332,694,723	3,149,255,197	2,808,036,127
Expenses:								
Maintenance of way and structures	1,113,765,212	951,045,279	395,665,794	334,961,801	233,678,714	200,353,459	484,420,704	415,730,019
Depreciation	100,484,078	98,514,699	41,489,599	41,639,611	18,646,421	17,656,097	40,348,058	39,218,991
Retirements	12,950,163	10,728,534	4,774,110	3,686,687	2,643,410	2,094,613	5,532,643	4,947,234
Deferred maintenance	*1,565,720	*1,683,240	*1,384,008	*1,025,283	*181,713	*260,858	1	*397,099
Amortization of defense projects	1,015,893	1,354,757	266,669	156,956	324,133	401,576	425,091	796,225
Equalization	3,803,208	1,714,440	*1,627,739	*2,690,075	4,728,417	5,597,898	702,530	*1,193,383
All other	997,077,590	840,416,089	352,147,163	293,193,905	207,518,046	174,864,133	437,412,381	372,358,051
Maintenance of equipment	1,478,792,515	1,239,760,651	613,082,385	520,634,885	296,545,319	241,178,794	569,164,811	477,946,972
Depreciation	235,994,176	221,201,325	86,343,532	82,215,777	51,911,994	49,554,825	97,738,650	89,430,723
Retirements	*1,719,332	*433,980	*929,492	*74,646	*426,533	*185,085	*363,307	*174,249
Deferred maintenance and major repairs	*12,666,502	*9,284,843	*12,470,896	*8,665,810	*18,181	*113,225	*177,425	*505,808
Amortization of defense projects	33,235,089	10,981,120	15,216,442	4,063,226	9,010,867	2,130,260	9,007,780	4,787,634
Equalization	1,249,259	4,340,703	*29,538	2,816,205	694,378	907,221	584,419	617,277
All other	1,222,699,825	1,012,956,326	524,952,337	440,280,133	235,372,794	188,884,798	462,374,694	383,791,395
Traffic	158,084,194	142,823,125	52,760,741	48,555,925	33,459,375	29,744,489	71,864,078	64,522,711
Transportation—Rail line	2,949,116,102	2,542,646,732	1,240,127,266	1,078,270,723	530,518,686	460,231,242	1,178,470,150	1,004,144,767
Miscellaneous operations	93,367,010	82,163,227	32,148,648	28,961,381	14,375,859	12,310,920	46,842,503	40,890,926
General	227,064,082	201,756,061	86,702,224	78,495,463	48,461,292	43,136,131	91,900,566	80,124,467
Railway operating expenses	6,020,189,115	5,160,195,075	2,420,487,058	2,089,880,178	1,157,039,245	986,955,035	2,442,662,812	2,083,359,862
Net revenue from railway operations	1,598,372,638	1,597,501,275	507,632,962	527,085,322	384,147,291	345,739,688	706,592,385	724,676,265
Railway tax accruals	857,337,404	783,172,146	258,791,090	246,053,421	218,833,574	185,201,059	379,712,740	351,917,666
Pay-roll taxes	215,117,111	193,144,996	87,845,223	79,322,275	41,170,374	36,507,431	86,101,514	77,315,290
Federal income taxes†	378,751,300	342,584,639	76,863,436	78,909,545	121,456,100	95,396,023	180,431,764	168,279,071
All other taxes	263,468,993	247,442,511	94,082,431	87,821,601	56,207,100	53,297,605	113,179,462	106,323,305
Railway operating income	741,035,234	814,329,129	248,841,872	281,031,901	165,313,717	160,538,629	326,879,645	372,758,599
Equipment rents—Dr. balance	118,570,973	104,496,429	52,146,536	50,746,264	*3,557,015	*11,845,027	69,981,452	65,595,192
Joint facility rent—Dr. balance	32,763,491	29,481,027	16,021,866	13,913,090	4,479,139	4,494,373	12,262,486	11,073,564
Net railway operating income	589,700,770	680,351,673	180,673,470	216,372,547	164,391,593	167,889,283	244,635,707	296,089,843
Ratio of expenses to revenues (percent)	79.0	76.4	82.7	79.9	75.1	74.1	77.6	74.2

†Includes income tax, surtax, and excess profits tax.
*Decrease, deficit, or other reverse item.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

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ON THE R.F.&P

One of the R. F. & P. Radio equipped Diesels in constant contact with caboose and wayside stations.

Engineer using Motorola 2-way radio gives and gets important information *all the time* up and down the R .F. & P. line.

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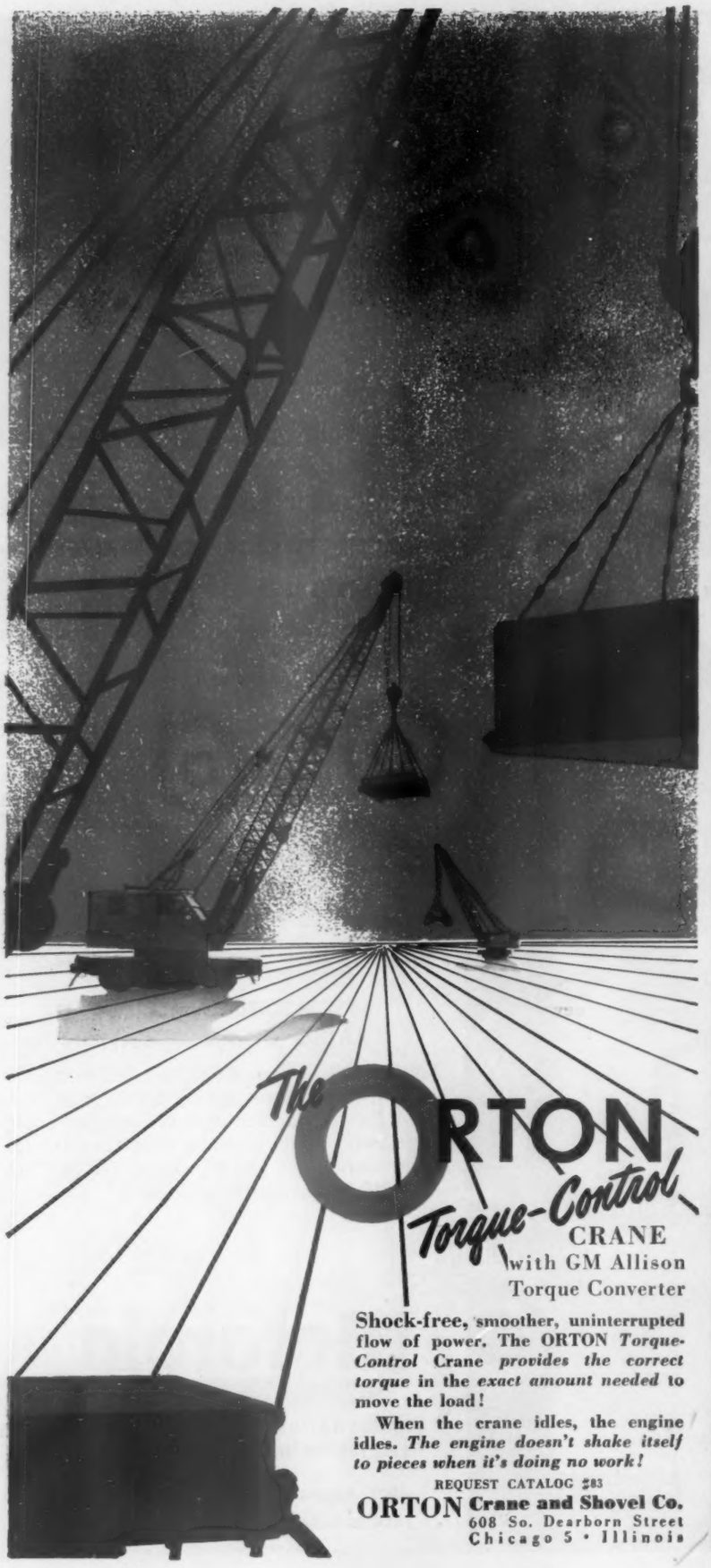
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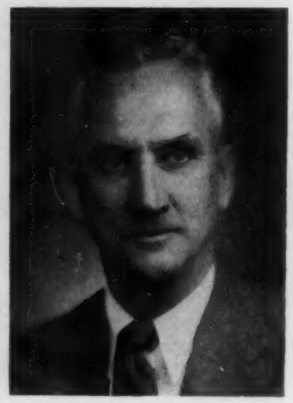
(*Continued from page* 82)

quarters at St. Paul. He succeeds **R. C. Thayer,** who died November 20, as reported in *Railway Age* December 3. **E. E. Thompson** succeeds Mr. Fox at St. Paul.

Mr. Fox has been assistant superintendent of telegraph since 1941. He



A. H. Fox

was draftsman for the Northwestern Bell Telephone Company from 1916 to 1920, when he joined the railway's telegraph department in the same capacity.

Richard F. Beck, field engineer of the ELGIN, JOLIET & EASTERN, has been appointed resident engineer at Gary, Ind.

SPECIAL

Moving locally to implement the broad reorganization of its personnel department and the new plan to expand and intensify employee relations activities, the PENNSYLVANIA has announced appointment of the following supervisors of personnel: **Gilson C. Felton,** Columbus division; **Stewart J. Wilson, Jr.,** New York division; **Darrell S. Johnson,** Cincinnati division; **Frederick J. Moore,** Chicago division; **Harry B. Brevoort, Jr.,** Fort Wayne division; **George N. Anderson,** Southwestern division; and **C. H. Bisbing,** Maryland division. Mr. Felton has been engineer, telegraph and signals, in the office of the chief engineer at Philadelphia since January 1950. Mr. Wilson has been serving as examiner in the labor and wages department of the Eastern region at Philadelphia. Mr. Johnson has been assistant trainmaster on the Columbus division since 1949. Mr. Moore has been examiner, labor and wages, in the office of the superintendent of personnel of the Western region at Chicago. Mr. Brevoort has been assistant road foreman of engines of the New York division since 1941. Mr. Anderson has been chief clerk to superintendent of the Southwestern division at Indianapolis. Mr. Bisbing has been chief clerk in the

Maintenance Records Show Savings Made by PRESSURE GROUTING

AN ANALYSIS of maintenance data on 36 track stabilization projects proves the tremendous money-saving possibilities of portland cement pressure grouting. These projects are located on 12 railroads and total more than 46 miles.

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Where man hours was the basis, maintenance dropped from an average of 6,072.8 hours per mile per year before grouting to an average of only 2,043.7 hours per mile per year after grouting. The reduction ranged from 41% to 100% with an average saving of 66% in man hours per mile per year.

Those railroads using a cost basis found that maintenance labor costs dropped from an average of $6,233.16 per mile per year before pressure grouting to an average of only $769.70 per mile per year after pressure grouting. The reduction ranged from 27% to 100% and averaged 88%.

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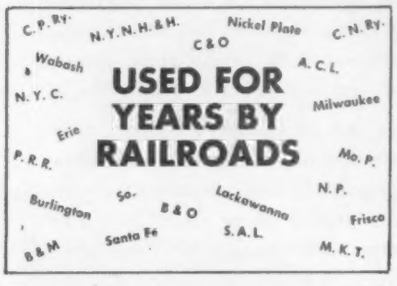

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office of the general superintendent motive power of the Western region at Chicago.

The PENNSYLVANIA has also appointed six supervisors of personnel for the six divisions of its Central region, as follows: Pittsburgh division, at Pittsburgh, **D. L. Moore,** former supervisor of safety of that division; Conemaugh division, at Pittsburgh, **J. H. Kerchner,** former assistant division engineer of the Panhandle division; Eastern division, at Pittsburgh, **J. A. Bonelli,** former assistant trainmaster of the Pittsburgh division; Panhandle division, at Pittsburgh, **J. R. Love,** former captain of police of the Conemaugh division; Lake division, at Cleveland, **P. N. Mansfield,** former supervising agent of the Panhandle division; and Northern division, at Buffalo, **A. M. Highgate,** former supervisor, labor-wages, Northern division.

F. M. Conder has been appointed assistant director of personnel of the TEXAS & PACIFIC at Dallas. The position of supervisor of wages has been abolished.

OBITUARY

William A. Northcutt, general solicitor of the LOUISVILLE & NASHVILLE, died in Louisville, Ky., on November 19 at the age of 75. He had served in the company's law department for over 50 years, having started in 1900 as stenographer. He subsequently held the positions of chief

William A. Northcutt

clerk in the law department, commerce attorney, and general attorney. He was appointed general solicitor in 1921. Mr. Northcutt received a law degree in 1904 from the University of Louisville's Law School.

Edward Price, treasurer of the CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA, was fatally injured in an automobile accident in St. Paul on November 25. Mr. Price's entire business career was with the C. St. P. M. & O., with which he started as a water boy, in St. Paul, in 1902. After serving in numerous other capacities, he became traveling auditor in 1916, holding that position until 1924, when he was promoted to general accountant. In 1929 he was appointed auditor of freight overcharge claims and in 1938 became assistant treasurer. He became treasurer in 1946.

Charles J. Collins, general passenger traffic manager of the UNION PACIFIC, died November 29 in Chicago.

Mr. Collins attended Ohio State University and began his railroad career in 1908 as a ticket seller with the Union Depot Company at Columbus, Ohio. From 1909 to 1913, he served as assistant ticket agent and city passenger agent at Columbus for the Pennsylvania. He then joined the U.P. at Cincinnati as a traveling agent, and in 1917 became Chicago representative of the department of tours maintained by the U.P. and the Chicago & North Western. In 1920 he was promoted to manager of the department, transferring in 1926 to Portland, Ore., as U.P. general passenger agent. Mr. Collins went to Omaha in

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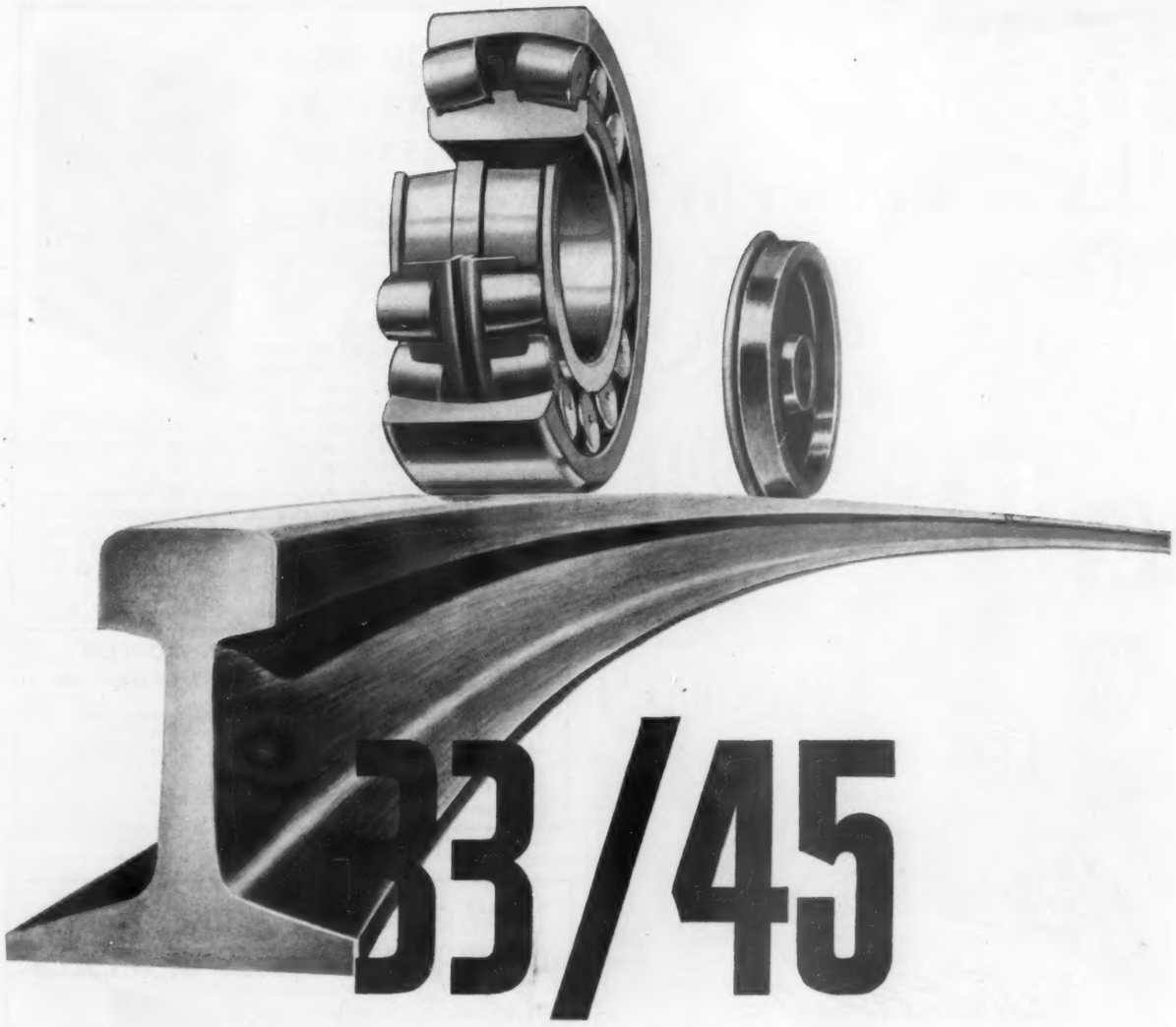
William G. Murphy, director of public relations of the UNION PACIFIC, at Omaha, died there on December 4. Mr. Murphy began his journalistic career as a reporter for the "Nonpareil" at Council Bluffs, Iowa, in 1917. Following a brief association with a newspaper in Pocatello, Idaho, he joined the staff of the former "Daily News" in Omaha in 1921, rising to the post of city editor. From 1928 to 1937 he served as news editor and city editor of the "Omaha Bee-News", and for a brief period during 1937 was night city editor of the "Omaha World-Herald." Mr. Murphy joined the U.P. in 1937 as news bureau manager and was promoted to director of public relations in 1944.



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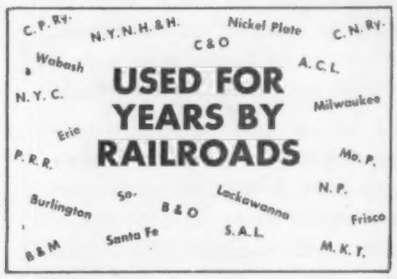

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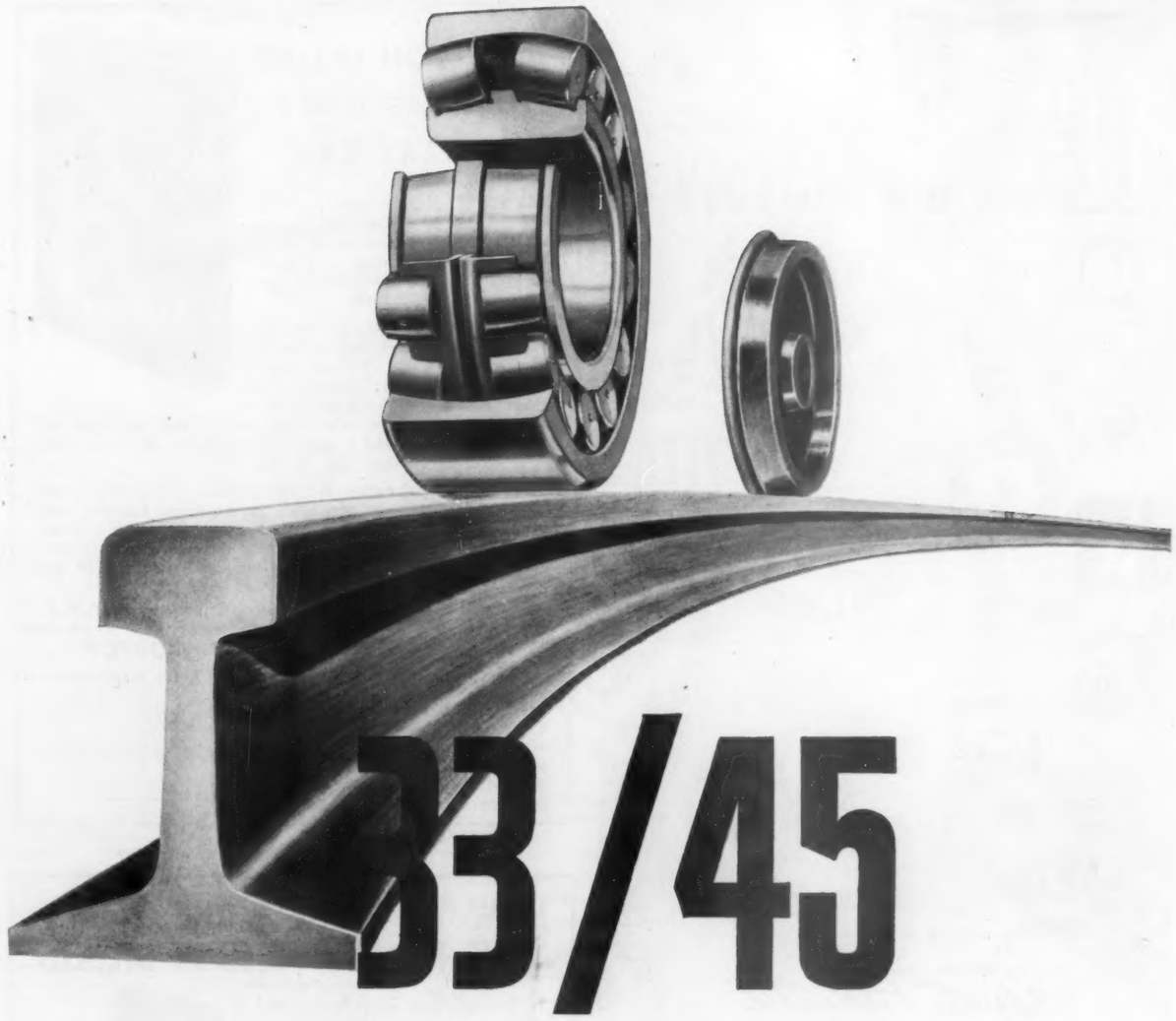

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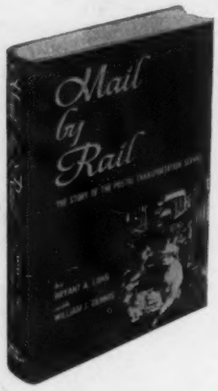

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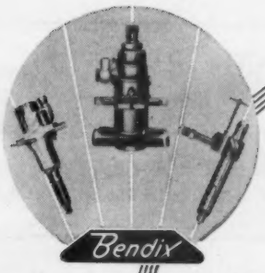

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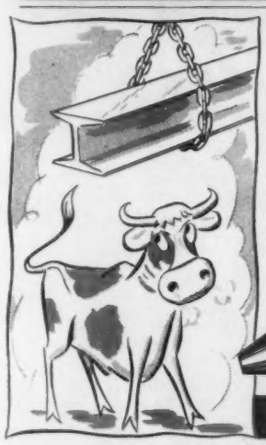

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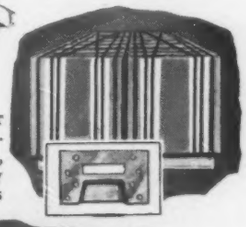

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